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SOME BEHAVIORAL CORRELATES OF ORGANIZATIONAL CLIMATES AND CULTURES.

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THE INFLUENCE OF SCHOOL CULTURES (CONVENTIONAL, WORK, AND IMPULSE EXPRESSION) ON SELECTED PUPIL AND TEACHER BEHAVIOR VARIABLES WAS STUDIED. THE VARIABLES INCLUDED PUPIL ACHIEVEMENT, TEACHER AND PUPIL ABSENTEEISM, AND TEACHER TURNOVER. ALSO STUDIED WAS THE SOCIOECONOMIC LEVEL OF SCHOOL NEIGHBORHOODS AS RELATED TO SCHOOL CULTURE. TEACHERS AND PUPILS OF 40 SCHOOLS IN A LARGE URBAN SCHOOL SYSTEM SERVED AS THE SAMPLE. THE INSTRUMENTS EMPLOYED IN THE STUDY INCLUDED (1) THE ACTIVITIES INDEX AND THE ORGANIZATIONAL CLIMATE INDEX FOR TEACHER RESPONSE, (2) THE IOWA TESTS OF BASIC SKILLS AND OF EDUCATIONAL DEVELOPMENT FOR PUPIL RESPONSE, AND (3) A SOCIOECONOMIC AREAS INDEX. THE CONCLUSIONS WERE THAT (1) THE SOCIOECONOMIC LEVEL OF THE SCHOOL NEIGHBORHOOD DOES NOT AFFECT THE CULTURE OF THE SCHOOL, AND (2) RELATIONSHIPS BETWEEN PUPIL-TEACHER BEHAVIORS AND SCHOOL CULTURE WERE NEGLIGIBLE IN ALL CASES EXCEPT FOR PUPIL ABSENTEEISM. (RS)

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SOME BEHAVIORAL CORRELATES OF ORGANIZATIONAL
CLIMATES AND CULTURES

by

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1966

FINAL REPORT

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George G. Hamaty

CONTENTS

	Page
ACKNOWLEDGMENTS	ii
LIST OF TABLES	
LIST OF ILLUSTRATIONS	
Chapter	
I. INTRODUCTION	1
Significance of the Study	1
Statement of the Problem	3
Definitions	4
Assumptions	9
Hypotheses	9
Design of the Study	10
Data and Instrumentation	11
Data Collection	14
Analysis of Data	15
Limitations	15
II. REVIEW OF THE LITERATURE	17
Organizational Behavior	17
Organizational Climate	20
Organizational Culture	23
The Syracuse Indexes	26
Selected Pupil and Teacher Behaviors	29
Pupil Achievement	29
Socio-Economic Level	37
Adaptive Behavior	40
Absenteeism and Turnover	41
III. DESIGN, METHODOLOGY AND TECHNIQUES	55
Research Population	56
Procedures	57
Instrumentation	59

Chapter	Page
Characteristics of the Activities Index, College Characteristics Index and the Organizational Climate Index.	59
Need-Press Scale Definitions . . .	60
AI-OCI Scale Characteristics . . .	62
Factor Structure--AI	62
Factor Structure--OCI	68
Factor Structure--CCI	72
Pupil Achievement Measures	78
Iowa Tests of Basic Skills	78
Iowa Tests of Educational Development	80
Analysis of Data	84
IV. FINDINGS	85
Organizational Culture Analysis Process .	85
Culture Scores	90
Contribution of AI and OCI Factors to Culture Scores	91
Defining Deviant and Homogeneous Schools.	102
Relationships of Culture I and Selected Pupil and Teacher Variables	108
Relationships of Culture II and Selected Pupil and Teacher Variables	112
Relationships of Culture III and Selected Pupil and Teacher Variables	116
Relationships of the Socio-Economic Level of School Neighborhoods and Selected Pupil and Teacher Variables . .	121
V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS . . .	126
Conclusions	130
Some Further Findings	134
Deviant and Homogeneous Schools . . .	134
AI Deviant Schools	134
OCI Deviant Schools	137
AI and OCI Deviant Schools . . .	139
Summary of Findings Relating to Culture Scores and the Variables Under Study . .	140
Socio-Economic Level	140
Implications for Research	146

APPENDICES	Page
A. AI-OCI FACTOR VALUES FOR SCHOOLS	148
B. ORGANIZATIONAL CLIMATE INDEX--FORM 1163 . .	154
C. ACTIVITIES INDEX	162
D. PUPIL ACHIEVEMENT	170
E. PUPIL ABSENTEEISM	172
F. TEACHER ABSENTEEISM	174
G. TEACHER TURNOVER	176
H. SOCIO-ECONOMIC LEVEL OF SCHOOL NEIGHBORHOODS	178
BIBLIOGRAPHY	180
BIOGRAPHICAL DATA	

LIST OF TABLES

Table	Page
1. Equamax Rotation, Organizational Climate Index, 6 Factor Solution	73
2. Comparisons of Factors--OCI-CCI	77
3. Factor Intercorrelations Between the AI and OCI for Forty-one Schools.	86
4. Principal Axis Factor Analysis AI-OCI for Forty-one Matched Schools.	88
5. Combined AI-OCI Rotation for Forty-one Schools, 5 Factor Solution	89
6. Combined AI-OCI Factor Scores--Culture I . .	92
7. Combined AI-OCI Factor Scores--Culture II .	93
8. Combined AI-OCI Factor Scores--Culture III .	94
9. Correlations Among Pupil and Teacher Variables and Culture I Scores for Homogeneous Schools	109
10. Comparisons of Means of Deviant Culture I Schools Influenced by AI Factors and Homogeneous Schools on Pupil and Teacher Variables	110
11. Comparisons of Means of Deviant Culture I Schools Influenced by OCI Factors and Homogeneous Schools on Pupil and Teacher Variables	111

Table		Page
12.	Comparisons of Means of Deviant Culture I Schools Influenced by OCI Factors and Deviant Culture I Schools Influenced by AI Factors on Pupil and Teacher Variables . . .	112
13.	Correlations Among Pupil and Teacher Variables and Culture II Scores for Homogeneous Schools.	113
14.	Comparisons of Means of Deviant Culture II Schools Influenced by AI Factors and Homogeneous Schools on Pupil and Teacher Variables.	115
15.	Comparisons of Means of Deviant Culture II Schools Influenced by OCI Factors and Homogeneous Schools on Pupil and Teacher Variables.	116
16.	Comparisons of Means of Deviant Culture II Schools Influenced by OCI Factors and Deviant Culture II Schools Influenced by AI Factors on Pupil and Teacher Variables . . .	117
17.	Correlations Among Pupil and Teacher Variables and Culture III Scores for Homogeneous Schools.	118
18.	Comparisons of Means of Deviant Culture III Schools Influenced by AI Factors and Homogeneous Schools on Pupil and Teacher Variables.	119
19.	Comparisons of Means of Deviant Culture III Schools Influenced by OCI Factors and Homogeneous Schools on Pupil and Teacher Variables.	120

Table		Page
20.	Comparisons of Means of Deviant Culture III Schools Influenced by OCI Factors and Deviant Culture III Schools Influenced by AI Factors on Pupil and Teacher Variables ..	121
21.	Correlations Among Pupil and Teacher Variables and the Socio-Economic Level of School Neighborhoods.	123
22.	Partial Correlations of Culture Score With Each Variable Removing the Socio-Economic Level of School Neighborhoods	124
23.	AI-OCI Factor Values for Schools	149
24.	Pupil Achievement	171
25.	Pupil Absenteeism	173
26.	Teacher Absenteeism	175
27.	Teacher Turnover.	177
28.	Socio-Economic Level of School Neighborhoods	179

LIST OF ILLUSTRATIONS

Figure	Page
1. Theoretical and Actual Contributions of AI and OCI Factors for Culture I	96
2. Theoretical and Actual Contributions of AI and OCI Factors for Culture II	98
3. Theoretical and Actual Contributions of AI and OCI Factors for Culture III	101
4. Scatter Diagram and Regression Lines for the AI and OCI Factor Scores in Culture I. .	105
5. Scatter Diagram and Regression Lines for the AI and OCI Factor Scores in Culture II .	106
6. Scatter Diagram and Regression Lines for The AI and OCI Factor Scores in Culture III.	107

CHAPTER I

INTRODUCTION

This study is focused on the influence of school cultures on selected pupil and teacher adjustment indices. Culture is defined here as joint environmental press and personality needs factors; the behavior indices involve pupil achievement, pupil absenteeism, teacher absenteeism, and teacher turnover. Recent studies of the psychological environment of public schools have attempted to clarify the relationship between teacher personality needs and environmental press of the school. The present study will extend that research to the influence of the school culture on certain behaviors exhibited by students and teachers.

Significance of the Study

In the past, teacher personality characteristics¹ and institutional settings² have been investigated as separate entities. Ryans' study revealed that teacher behavior was

¹D. G. Ryans, Characteristics of Teachers (Washington, D.C.: American Council On Education, 1960), p. 398.

²Luther Gulick and L. Urwick (eds.), "Notes on the Theory of Organization," Papers on the Science of Administration (New York: Institute of Public Administration, 1937), p. 13.

determined by both the personality of the individual and his environment. An attempt has been made to integrate these two factors in order to study the total organizational climate of public schools.¹ Stern has studied climates in a number of organizations,² Steinhoff using Stern's concepts, has identified a relationship between teacher personality needs and the institutional press in a large urban school system.³ Now that the ability to relate both of these domains to one another has been established, one is provided with the opportunity to study the total impact of the institution on both teacher and pupil behaviors.

The particular behaviors chosen as dependent variables in this study are pupil and teacher behaviors that seem most likely to be affected by the institutional setting. That is, if the culture or the climate of a school has any theoretical importance, it must be related to the behavior of the personnel within the school, particularly those behaviors that the institution seeks to foster or that are essential for the achievement of

¹Andrew W. Halpin and Don B. Croft, The Organizational Climate of Schools (Chicago: Midwest Administration Center, University of Chicago, 1963), p. 130.

²George G. Stern, "Student Ecology and the College Environment," The Journal of Medical Education, XL (1965), 132-54.

³Carl R. Steinhoff, Organizational Climate in a Public School System (Washington: U.S. Department of Health, Education, and Welfare, 1965), p. 178.

its purposes. Pupil achievement can be regarded as one of the goals of our educational system, therefore, it has been selected to determine whether it is related to culture. Similarly, pupil absenteeism is incongruent with institutional goals and it suggests that the institution is not meeting its goals.

The teacher behaviors selected for investigation include teacher absenteeism and teacher turnover which tend to reflect the satisfaction of teacher needs in relation to their expectations. If one is able to study the impact of the institution on teacher and pupil behaviors, then he may be able to describe organizational climates which will better meet individual needs and achieve organizational goals.

Statement of the Problem

The purpose of this study is to examine some behavioral correlates of public school climates and cultures. The problem basic to the study is to determine the effect of school culture on the behavior of students and teachers.

Definitions

In order to facilitate the understanding of the objectives unique to this research, the meaning of certain specific terms is essential. The terms that follow are defined in the manner in which they are employed. The instruments used for measuring subjects and for defining organizational climates are standardized instruments for which norms have been established and published. All other data employed in the investigation are judged adequate for the purpose of this research.

1. Needs. The organized internal tendencies which appear to give unity and direction to personality.¹

2. Press. Environmental press is composed of those forces which appear to give unity and direction to a social system.²

3. Organizational Climate. Organizational Climate refers to the specific environmental press of an organization. Organizational climate is to the organization what personality is to the individual.³

¹George G. Stern, "B = f (P,E)," Journal of Projective Techniques and Personality Assessment, XXVIII, No. 2 (1964), 165.

²Ibid.

³Andrew W. Halpin and Don B. Croft, "The Organizational Climate of Schools," Administrator's Notebook, XI, No. 7 (March, 1963).

4. Activities Index. The Activities Index is a multi-dimensional inventory for measuring personality needs and is composed of 30 ten-item scales corresponding to the taxonomy adapted from Murray by Stern.¹

5. Organizational Climate Index, Form 1163. The Organizational Climate Index is a multi-dimensional inventory for measuring organizational press. The instrument was developed by Stern and Steinhoff and is composed of 30 ten-item scales corresponding to the taxonomy adapted from Murray by Stern.²

6. School Culture. School Culture refers to the dynamic interaction of organizational climate and individual personality needs which results in individual behavior in an organizational context. Operationally it refers to joint needs-press factors containing components from personality and environment. The cultural types used are those developed by Stern and Steinhoff.³

6a. Conventional Culture. The Conventional Culture consists of high negative loadings from the personality factors of self assertion, audacity-timidity, intellectual interests, motivation, and applied interests associated with the achievement orientation of the teacher and high positive loadings on the supportive aspects of

¹George G. Stern, Morris J. Stein, and Benjamin S. Bloom, Methods in Personality Assessment (Glencoe: Free Press, 1956).

²Steinhoff, op. cit., p. 25.

³Ibid., p. 94.

the organizational structure. The press components indicate a climate in which non-hostility, nurturance, and tolerance seem to be characteristic.

6 b. Impulse Expression Culture. The Impulse Expression Culture contains high positive loadings from the personality factors of self assertion, closeness, sensuousness, expressiveness, and egoism associated with the satisfaction of social needs of the teacher and high positive loadings on the impulse aspects of the organizational structure. The press loadings indicate a climate in which aggression, restiveness, emotionality, exhibitionism, impulsiveness, play and sexuality are expressed, all pointing toward a pleasure-seeking environment.

6 c. Work Culture. The Work Culture is made up of high positive loadings in the need factors of orderliness, submissiveness, and closeness and high negative loadings in the need factors of self assertion and audacity. The press factors of organization and supportiveness are highly and positively correlated while the press factor of play is high and negatively correlated. Such a culture indicates a highly structured and directive organization

with rigidity, orderliness, and respect for authority typifying the atmosphere and with little regard for meeting the personality needs of the individual.

7. Pupil Achievement. Achievement is measured by scores gained on the Iowa Tests of Basic Skills given to pupils in grades six and nine and scores from the Iowa Tests of Educational Development given to students in grade eleven during the school year 1963-64 as reported to the Director of Research in the sample city school district.

8. Pupil Absenteeism. Absenteeism is the difference between the total possible attendance (aggregate membership) and the actual attendance (aggregate attendance) of students, kindergarten through grade twelve, as reported to the office of Pupil Personnel Services for the school year 1963-64.

9. Teacher Absenteeism. Teacher absenteeism is measured by the difference between the total possible attendance (aggregate membership) and actual attendance (aggregate attendance) of teachers, kindergarten through grade twelve as reported to the Payroll Department for

the school year 1963-64.

10. Teacher Turnover. Teacher Turnover is defined as the number of teachers who left a particular school building during or at the end of the 1963-64 school year as reported by the Teacher Personnel Office. There were three types: a) those moving outside of the district, b) those transferring to other buildings in the same district, and c) those leaving teaching entirely.

11. Socio-Economic Level of school neighborhoods. The Socio-Economic Level of school neighborhoods is inferred from the mean level of the census area served by the school. This level is determined by the Socio-Economic Area Index developed in the Socio-Economic and Ethnic Areas Syracuse and Onondaga County, N.Y. 1960.¹ This index is made up of five factors which include the percentage of craftsmen, operatives, service workers, and laborers; the median school year completed by the adult population over 25 years of age; the estimated market value of owned homes; the gross monthly rental for tenant-occupied dwellings; and the percentage of

¹Charles V. Willie and Morton O. Wagenfeld, Socio-Economic and Ethnic Areas Syracuse and Onondaga County, N.Y. 1960, Syracuse University (Syracuse: Syracuse University Youth Development Center, 1962), p. 1.

sound dwelling units. The first factor is mirrored so that it will vary directly with the other factors.

Assumptions

This study is predicated on the following assumptions:

1. The Activities Index and Organizational Climate Index are efficient measures of personality and environmental press.
2. The sample schools are similar in nature to schools in other large urban settings of the same size.
3. Teacher absenteeism, pupil absenteeism, and teacher turnover are similar to absenteeism and turnover in industry.

Hypotheses

The investigation of the problem involves testing certain hypotheses. These are stated as follows:

- H₁: In a culture characterized by convention there will be high pupil achievement, low pupil absenteeism, low teacher absenteeism, and low teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

H₂: In a culture characterized by work, there will be low pupil achievement, low pupil absenteeism, high teacher absenteeism, and high teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

H₃: In a culture characterized by impulse expression, there will be low pupil achievement, high pupil absenteeism, low teacher absenteeism, and low teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

Design of the Study

This study is descriptive, extending the findings of Steinhoff's A Study of Organizational Climate In a Public School System. He described the psychological environment of a large urban public school system using the need-press constructs postulated by Henry A. Murray¹ as operationalized by George G. Stern and his associates.² Steinhoff indentified three school cultures from composite need-press factors. The impact of these cultures will be analyzed in relation to data concerning pupil absenteeism,

¹Henry A. Murray, Explorations in Personality (New York: Oxford University Press, 1938).

²C.R. Pace and George G. Stern, "An Approach to the Measurement of Psychological Characteristics of College Environments," Journal of Educational Psychology, XLIX (1958), 269-77.

pupil achievement, teacher absenteeism, and teacher turnover.

Data and Instrumentation

The teachers and pupils of forty schools in a single large urban system were subjects of this study. Six types of data were collected:

1. The organizational climates and cultures of forty elementary and secondary schools.
2. Pupil achievement.
3. Pupil absenteeism.
4. Teacher absenteeism.
5. Teacher turnover.
6. Socio-economic levels of school neighborhoods.

These data were analyzed to determine the relationship between organizational climate and the other variables.

The instruments employed in this study were used to gain data relating to organizational climates and cultures and pupil achievement. Data concerning pupil absenteeism, pupil achievement, teacher absenteeism, teacher turnover, and socio-economic level of school neighborhoods were obtained from records maintained by the Board of Education of the school system under investigation.

During the school year 1963-64 the organizational climates and cultures of forty schools in a single large urban school system were identified by an analysis of the responses obtained from teachers of these schools to two instruments: 1) The Organizational Climate Index and 2) The Activities Index.

1. The Organizational Climate Index, Form 1163, was developed by George G. Stern and Carl R. Steinhoff.¹ The initial draft of the Organizational Climate Index was proposed as a measure of the administrative press of public school environments. It was to be used by teachers and administrators as well as students. The index was limited, however, because of the specific nature of its referents. The current form, 1163, expands the scope of the Organizational Climate Index for use in a variety of formal industrial and educational organizations as a common measure of environmental press. It is composed of thirty ten-item scales corresponding to the taxonomy adapted from Murray by Stern (see page).
2. The Activities Index was developed to measure personality needs. The index was prepared originally in collaboration with Bloom, Stein,

¹Steinhoff, op. cit., Appendix C.

Stern, and Lane for use in the Chicago studies of personality assessment and also draws heavily upon the need-press constructs postulated by Murray and developed by Stern.¹ It consists of 300 items describing commonplace daily activities distributed among thirty scales of ten items each, to which the individual records his like or dislike (see page).

Pupil achievement data for the school year 1963-64 was obtained from two instruments: 1) The Iowa Tests of Basic Skills and 2) The Iowa Tests of Educational Development.

1. The Iowa Tests of Basic Skills was developed under the direction of E.F. Lindquist and A.N. Hieronymus. It is devised to test the functional skills of children in grades three through nine in the areas of vocabulary, reading comprehension, language skills, work-study skills, and arithmetic. Herrick, referring to the battery, states:

A major strength of this new battery is its curricular validation. Besides the usual widespread administration to the sample test items and the establishment of discrimination and difficulty indexes, extremely careful identification and definition of the skill processes being tested was done before test items were devised.²

¹ Stern, Stein, and Bloom, op. cit., p. 52.

² Virgil E. Herrick, (Reviewer), "Iowa Tests of Basic Skills," Fifth Mental Measurements Yearbook (Highland Park: Gryphon Press, 1959), p. 32.

2. The Iowa Tests of Educational Development is published by Science Research Associates of Chicago. It is a battery of nine objective tests designed to provide a comprehensive and dependable description of the general educational development of the high school student.

A major use of the tests is to reveal the pattern of individual student's development and to show growth from year to year. This information would provide a basis for adapting instruction to meet the measured needs of each individual.¹

Data Collection

In order to infer the socio-economic level of school neighborhoods, the Socio-Economic Areas Index was employed. This index assists in the delineation of relatively homogeneous socio-economic areas. It is composed of five factors: 1) the percentage of craftsmen, operatives, service workers, and laborers; 2) the median school year completed by the adult population over 25 years of age; 3) the estimated market value of owned homes; 4) the gross monthly rental for tenant-occupied dwellings; and 5) the percentage of sound dwelling units, all taken from official U.S. Census reports.²

¹Oscar K. Buros (ed.), Fifth Mental Measurements Yearbook (Highland Park: Gryphon Press, 1959), p. 38.

²Willie and Wagenfeld, loc. cit.

All necessary data concerning pupil achievement, pupil absenteeism, teacher absenteeism, and teacher turnover for the school year 1963-64 was made available to the investigator through the central administrative offices of the urban school system. Information about the organizational climates and cultures was collected by Steinhoff.¹

Analysis of Data

Schools which are considered to be representative of a culture are analyzed by use of the intercorrelation technique. T-tests were employed to compare schools of each culture which were pervasively influenced by either the AI or OCI factors to schools which were considered to be homogeneous within each culture.

Limitations

There were several limitations to the present study.

1. The study deals with only one city and may not be representative of other cities.
2. Many other factors that influence organizational behavior are not being investigated. This includes personality variables which cannot be measured on an objective test.

¹Steinhoff, op. cit., p. 178.

3. Organizational and personnel changes that occurred within the school system prevented the investigator from conducting longitudinal investigating activities.
4. While the research deals with three cultures, it may be that a common factor is running through all the cultures which does not permit them to be completely distinct from one another.

CHAPTER II

REVIEW OF THE LITERATURE

The present investigation embodies ideas drawn from research conducted by Stern and Steinhoff. Stern¹ carried on extensive research on college environments while Steinhoff² examined the organizational climate of public schools. These studies sought to measure psychological variables associated with behavior in formal organizations. It is the goal of the present study to establish a relationship between the psychological environment and selected pupil and teacher behaviors. With that emphasis in mind, an examination of previous attempts to conceptualize organizational and individual behavior has been undertaken.

Organizational Behavior

In order to study human behavior in formal organizations, researchers have found it profitable to investigate the relationship between the dimensions of organizational tasks and individual needs. Barnard discussed this relationship

¹Stern, op. cit., 1965, p. 15.

²Steinhoff, op. cit., p. 178.

in terms of "effectiveness" and "efficiency."¹

Roethlisberger and Dickson stated that the organization has two purposes: producing a product and distributing satisfaction among the members of the organization.² Writers such as Cartwright and Zanders have proposed that all group objectives fit under two headings of "goal achievement" and "group maintenance behaviors."³ In developing the Leadership Behavior Description Questionnaire, Halpin discussed the role of the leader in terms of "initiating structure" and "consideration" suggesting leadership to bring about organizational goals while satisfying individual needs.⁴

Schultz contended that each person has three interpersonal needs: inclusion, control, and affection. He stated that if "compatibility" between needs and roles is maintained a high degree of success will be established in these dimensions of behavior.⁵ Halpin and Croft expanded

¹Chester I. Barnard, The Functions of the Executive, (Cambridge: Harvard University Press, 1938), p. 55.

²E.J. Roethlisberger and William J. Dickson, Management and the Worker (Cambridge: Harvard University Press, 1939), p. 552.

³Dorin Cartwright and Alvin Zanders, Group Dynamics: Research and Theory (Evanston: Row, Paterson and Co., 1953), p. 541.

⁴Andrew W. Halpin, The Leadership Behavior of School Superintendents (Ohio State University: The School-Community Development Study Monograph Series, No. 4; Columbus, Ohio: College of Education, Ohio State, 1956), p. 4.

⁵W.C. Schultz, FIRO: A Three Dimensional Theory of Interpersonal Behavior (New York: Rinehart and Co., 1958), p. 105.

the concepts of task achievement and needs satisfaction by developing the Organizational Climate Description Questionnaire.¹ However, the OCDQ was limited in two aspects: its inability to describe the organizational tasks and individual needs in comparable dimensions and the limiting of the questionnaire to one type of organizational setting.

Getzels defined organizational behavior as the interaction of two dimensions: idiographic and nomothetic, relating the organism and the environment.² It was Getzels' contention that a given act represented simultaneous reaction to both dimensions. He derived the equation $B = f(R \times P)$, where B is observed behavior, R is an institutional role, and P is the personality of the particular role incumbent. This formulation may be traced back to Lewin's equation $B = f(PE)$, defining behavior as a function of the interaction of person with his environment.^{3, 4}

Although these constructs have led to the development of general measures of environment and organism, they have not been able, according to Sells, to:

¹ Halpin and Don B. Croft, The Organizational Climate of Schools (Washington: U.S. Office of Education, 1962).

² Jacob W. Getzels, "Administration As A Social Process," Administrative Theory in Education (Chicago: 1958), pp. 150-65.

³ Kurt Lewin, Principles of Topological Psychology (New York: McGraw-Hill, 1936).

⁴ Kurt Lewin, Field Theory in Social Sciences (New York: Harper, 1951).

objectively evaluate the encounter of organism and environment and to evolve a more satisfactory and systematic total conceptualization of the whole environment in common terms and comparable magnitudes.¹

Organizational Climate

Organizational climate refers to certain specifications of organizational behavior. Lonsdale defines this concept as the

global assessment of the interaction between the task-achievement dimensions and the needs-satisfaction dimension within the organization, or, in other words, of the extent of the task-needs integration.²

Halpin and Croft refer to climate as the personality of the organization.³ An extensive review of over 100 studies of organizations by Forehand and Gilmer provides a number of methods for assessing environmental variation and yields hypotheses regarding the interaction of persons and environments.⁴ It is their contention that organizational climate

¹Saul B. Sells, "Dimensions of Stimulus Situations Which Account for Behavior Differences," Stimulus Determinants of Behavior, ed. Saul B. Sells (New York: The Roland Press, 1963), p. 56.

²Richard C. Lonsdale, "Maintaining the Organization in Dynamic Equilibrium," Behavioral Science and Educational Administration, Sixty-third Yearbook of the National Society for the Study of Education, Part II (Chicago: University of Chicago Press, 1964), 166.

³Ibid., p. 169.

⁴Garlie A. Forehand and B. von Haller Gilmer, "Environmental Variation in Studies of Organizational Behavior," Psychological Bulletin LXII (December, 1964), 361-82.

may be defined as:

the set of characteristics that describes an organization and that a) distinguish the organization from other organizations b) are relatively enduring over time, and c) influence the behavior of people in the organization.¹

It is also interesting to note the various methodologies employed to observe climate variations. Forehand and Gilmer point out the following: field studies, assessment of perceptions of organization by organization members, observation of objective organization properties, and experimental variation of organizational properties. However, according to Stern, only Murray's needs-press constructs represent both the organism and the environment "in common terms and comparable magnitudes."²

Murray created a taxonomy for describing both the environmental pressures and the characteristic ways in which the individual structures the environment for himself. The external pressures are called press and their internal counter-parts are classified as needs.³

Murray defined a need as:

a force in the brain region which organizes perception, apperception, intellection, and action in such a way as to transform in a

¹ Ibid., p. 362.

² Stern, op. cit., pp. 161-68.

³ Henry A. Murray, Explorations in Personality (New York: Oxford University Press, 1938), p. 124.

certain direction an existing unsatisfying situation.¹

Stern, in analyzing this definition, points out that there were two significant concepts to be noted. First, needs are functional in character, being identified with the goals or purposes which interaction serves for an individual and that they are essentially a taxonomy of the objectives which individuals characteristically strive to achieve for themselves. Secondly, needs are revealed in the modes of behavior employed by the individual.²

The concept of environmental press, according to Stern:

provides an external situation counterpart to the internalized personality needs. However, there exists a number of different types of press which must be defined in order to make the term more meaningful. The beta press refers to the private, idiosyncratic, percept of the environment by an individual. The point at which this private world merges with that of others and common interpretation of the environment is shared with others consensual beta press is present.³

Although both properties of the beta press are of value, the latter aspect is most useful in describing organizational behavior. The alpha press is concerned with the stated,

¹Ibid.

²Stern, op. cit., p. 165.

³Ibid., p. 166.

formal, explicit objectives representing the purpose of an organization as seen in official pronouncements or by an independent observer outside the organization.¹

Press may be defined like needs as a taxonomy of the interaction processes manifested by an aggregate of individuals. Like needs, too, press may be inferred from self-estimates of behaviors likely to be characteristic of others in a given situation. The necessity for imbedding the judgments within the context of a specified situation is what distinguishes press items from need items.²

It has been demonstrated by Stern that the needs-press constructs can be used as a measure of organism and environment.³ These constructs provide the vehicle to evaluate objectively the transactional relationship between man and organization. For the purposes of the present study, organizational climate will refer to the consensual beta press of a given organizational unit. The composite of this consensual beta press and the aggregate needs of the participants will be used to designate the organizational culture.⁴

Organizational Culture

Steinhoff collected teacher personality and institutional press data from 41 schools in a large urban public

¹Ibid., p. 166.

²Ibid., p. 166.

³Steinhoff, op. cit., p. 17.

⁴Ibid., p. 18.

school system. He administered the Activities Index and the Organizational Climate Index, Form 1163 to staff members of these schools.¹ Both of the instruments are composed of items which yield scores for matching need and press constructs. Steinhoff factored the matrix intercorrelation among Organizational Climate Index scales and identified factors reflecting the organizational climate of each school. He then examined a composite analysis of the matrix of twelve teacher personality factors and six school press factors: as a result, three joint factors emerged and were labeled conventional, impulse expression and work cultures. The term culture rather than climate was used because the factors reflected both personality and environment in comparable magnitudes.

In the conventional culture teachers who had low needs in self-assertion, intellectual interests, motivation, and applied interests were found in schools high in supportiveness. It can be noted that the elementary schools were grouped at the high end of the culture, reflecting a conforming paternalistic cultural milieu.

¹Ibid., p. 178.

In the work culture teachers had high needs in timidity, orderliness, submissiveness, and closeness and low needs in self-assertion. These same schools were characterized by a high degree of supportiveness and organization and a low degree of impulse expression. It seems that the elementary schools with a high score were highly structured, work oriented institutions employing friendly but deferent and conforming teachers. Schools with low scores tended to be characterized by environments low in supportiveness and organization, employing people with relatively low dependency needs.

The impulse expression culture describes schools which were characterized by a high degree of impulse expression and which employ teachers who have high needs in self-assertion, closeness, sensuousness, expressiveness, and egoism which are measures of emotional expression. Schools high in this culture tend to be placed where high needs in the area of emotional expression are supported by the acceptance of socially aggressive behavior. Schools with low scores tend to be emotionally restricted and the behavior of teachers in these schools is likely to be highly

constrained.

Steinhoff's study established a relationship between individual personality needs and institutional press in a public school system. It now seems relevant to relate these findings to selected pupil and teacher behaviors in these environments. Assuming there is a difference in schools, a difference may exist in the effectiveness of interpersonal behavior. Furthermore, in cultures which are undesirable, dissonant behavior may reflect rejection of the goals of the organization.

The Syracuse Indexes

During the past ten years, Stern in cooperation with others has developed a number of indexes designed to measure personality need and environmental press. In 1956 the Activities Index was developed for use in the Chicago Studies of student personality needs.¹ Similarly, the College Characteristics Index was designed as a parallel instrument to measure academic press. Subsequent to this, the Evening College Characteristics Index and the High School Characteristics Index were developed to measure academic environments.

¹Stern, Stein, and Bloom, loc cit.

The Organizational Climate Index, Form 1163 was

generalized from its academically-oriented predecessors for use in a variety of formal educational and industrial organizations as a common measure of environmental press.¹

Various studies conducted by Stern using these Indexes have revealed the following conclusions about the characteristics of the instruments which are crucial to the current research:

1. Percepts of institutional environments are not a function of the personality characteristics of the participants. Correlations between need and press scales are uniformly low,^{2,3} and only begin to approach significant positive values in the case of items describing events totally unknown to the respondent.⁴ In other words, press are a function of needs only in the case of unstructured, ambiguous percepts. Factors extracted from a composite matrix of need and press scale score intercorrelations are also independent and specific to the particular source from which they were derived.⁵
2. Percepts of the environment by experienced participants are consensual. Press scales have substantially lower variances than need scales, indicating that respondents from the same institution are more alike in their separate

¹Steinhoff, op. cit., p. 20.

²A. McFee, "The Relation of Students' Needs to their Perception of a College Environment," Journal of Educational Psychology, LII (1961), 25-29.

³George G. Stern, "The Measurement of Psychological Characteristics of Students and Learning Environments," Measurement in Personality and Cognition, eds. S.J. Messick and J. Ross (New York: Wiley, 1962b), pp. 27-68.

⁴McFee, loc. cit.

⁵D.R. Saunders, "A Factor Analytic Study of the AI and the CCI," unpublished, undated report, Princeton, New Jersey.

perceptions of the institution than in their separate perceptions of themselves.^{1,2}

3. The consensual percepts of the environment reflects the objective environment. The indirect evidence for this assertion is based on the fact that there are highly significant differences between institutions on all press factors.³ More to the point, however, are the obvious parallels between profiles of press scores and the types of institutions from which they have been obtained.^{4,5,6,7,8} There are also significant differences between different types of units within the same institution,^{9,10} but not between different types of participants, such as students and faculty, with equal experience in the same institutions.¹¹ However, participants who differ in the extent of their experience differ also in the content of their perceptions; college freshmen tested prior to

¹George G. Stern, "Environments for Learning," The American College: A Psychological and Social Interpretation of the Higher Learning, ed. R.N. Sanford (New York: Wiley, 1962a), pp. 690-730.

²George G. Stern, Scoring Instructions and College Norms: Activities Index, College Characteristics Index (Syracuse: Syracuse University Psychological Research Center, 1963b), p. 28.

³Saunders, loc. cit.

⁴George G. Stern, "Congruence and Dissonance in the Ecology of College Students," Student Medicine, VIII (1960a) 304-39.

⁵Stern, loc. cit., 1962a.

⁶George G. Stern, "Characteristics of the Intellectual Climate in College Environments," Harvard Review, XXXIII (1963a), 5-41.

⁷Stern, loc. cit., 1963b.

⁸Stern, loc. cit., 1965.

⁹George G. Stern, "Student Values and Their Relationship to the College Environment," Research on College Students, ed. H.T. Sprague (Boulder, Colorado: Western Interstate Commission for Higher Education, 1960b), 67-104.

¹⁰Stern, loc. cit., 1962b

¹¹Pace and Stern, loc. cit., 1958.

admission respond in terms of a generalized myth that is independent of the particular college to which they have been admitted.¹

4. The collective needs of selected groups of persons reflect their objective personality characteristics. The evidence here is based on highly significant differences between student bodies on needs factor scores,² as well as on the apparent correspondence between needs score profiles and the types of student bodies from which they have been obtained.^{3,4,5,6,7,}

Selected Pupil and Teacher Behaviors

Pupil Achievement

The rationale for positing a relationship between organizational climate and pupil achievement draws upon some of the most significant research findings in climate and leadership roles on group life and productivity. Reference is made here to Lewin, Lippitt and White's work on interpersonal interactions of children in differing social

¹George G. Stern, "Continuity and Contrast in the Transition from High School to College," Orientation to College Learning--A Reappraisal, ed. N. C. Brown (Washington: American Council on Education, 1961), pp. 33-58.

²Saunders, loc. cit.

³Stern, loc. cit., 1960a.

⁴Stern, loc. cit., 1962a.

⁵Stern, loc. cit., 1963a.

⁶Stern, loc. cit., 1963b.

⁷Stern, loc. cit., 1965.

climates. Lippitt's major conclusions were:

1. That different styles of leader behavior produce differing social climate and differing group and individual behaviors.
2. That conversation categories differentiated leader-behavior techniques more adequately than did social-behavior categories.
3. That different leaders playing the same kind of leadership roles displayed very similar patterns of behavior and that group members reacted to the same kind of leadership style in strikingly similar and consistent fashion.
4. That group members in a democratic social climate were more friendly to each other, showed more group-mindedness, were more work-minded, showed greater initiative, and had a higher level of frustration than members in other groups.
5. That leader-behavior categories represented the important parameters to which the children reacted.¹

Lippitt's study marked the earliest, major, successful attempt to observe and control objectively some climate variables in group life. His clear demonstration of the influence of the leader on group life and productivity has had strong implications for teachers and administrators.

Subsequent to Lippitt's work, the entire complex or network of relationships in learning groups were examined. Withall treated the socio-emotional climate as a group

¹K. Lewin, R. Lippitt and R.K. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates," Journal of Social Psychology, X (1939), 271-99.

phenomenon determined primarily by the teacher's verbal behavior taken as representative of her total behavior. He developed an instrument called the Climate Index for categorizing and quantifying the verbal behavior of the teacher in any class.¹ Flanders used this instrument to investigate how learning and achievement were influenced in the classroom by the nature and quantity of the teacher-pupil interaction.² The student was placed in two different learning situations having reasonably equivalent learning tasks. The socio-emotional differences between the two situations were created by the role of the teacher. In a teacher-centered situation, the behavior of the teacher tended to support himself first, the problem second, and the student to operate efficiently in the situation, and, as a result, interpersonal anxieties were created. In a learner-centered situation, the behavior of the teacher tended to support the student first, the problem second, and the teacher third. As a consequence, the student was able to clarify his position in the structure of the interaction, and his interpersonal

¹J. Withall, "The Development of a Technique for the Measurement of Social-Emotional Climate in Classrooms," Journal of Experimental Education, XVII (1949), 347-61.

²N.A. Flanders, "Personal-Social Anxiety as a Factor in Learning" (unpublished Ph. D. dissertation, University of Chicago, 1949).

anxiety remained within tolerable limits. With the climate treated as an independent variable, measured by Withall's Climate Index, it was demonstrated that student behavior reflecting interpersonal anxiety took precedence over behavior oriented to the objective problem and learning content. It appeared, too, that demanding, directive, and deprecating teacher behavior vis-à-vis pupils resulted in withdrawal, apathy toward the achievement problem, aggressiveness, and hostility on the part of the pupils. On the other hand, teacher behavior which was oriented to the problem, analytical of student procedures according to publicly stated criteria, and generally learner-centered elicited less interpersonal anxiety, more problem-solving behavior, and a degree of emotional integration.

Buswell¹ and Kasper² found that the more popular and better-adjusted pupils were the better achievers and concluded that a good classroom climate would promote achievement. Similar teachers' influence on achievement was reported in an unpublished study by Stern, Masling, Denton,

¹M.M. Buswell, "The Relationship Between the Social Structure of the Classroom and the Academic Success of the Pupils," Journal of Experimental Education, XXII (1953), 37-52.

²A.A. Kasper, "A Study of the Relationships Among Classroom Climate, Emotional Adjustment, and Reading Achievement," Dissertation Abstracts, XVI (1956), 1399-1400.

Henderson, and Levin.¹ These investigators, using the Teacher Preference Schedules, could find no relationship between teachers' expressed attitudes or gratifications and either pupil behavior, sociometric structure, or performance. But they did find significant correlations between pupil vocabulary and the teacher's Activities Index scores for achievement ($r = .58$), emotionality ($r = .44$), and humanism ($r = .59$). Pupils' spelling level was correlated with teachers' AI scores for achievement ($r = .61$), counter-action ($r = .43$), fantasied achievement ($r = .41$), emotionality ($r = .43$), humanism ($r = .51$), and understanding ($r = .44$). Pupils IQ's were held constant for the several classes and schools included in the study.

Perhaps the most important study relating pupil achievement to the interaction between teacher and pupil personalities was reported by Heil and Washbourne.² Three teacher and four pupil personality types were identified by means of special instruments. The various teacher-pupil combinations were compared in terms of measures of pupil

¹G.G. Stern, et. al., "Two Scales for the Assessment of Unconscious Motivation for Teaching," Educational Psychological Measurement, XX (1960), 9-30.

²L.M. Heil and C. Washbourne, "Characteristics of Teachers Related to Children's Progress," Journal of Teacher Education, XII (December, 1961), 401-406.

achievement, teacher knowledge, and classroom ratings. The well integrated (self-controlling) teachers were the most effective with all types of students, whereas the weakly integrated (fearful) teachers were ineffective with everyone except the "strivers." The third type teacher (turbulent) identified by these investigators used intellectualization as a defensive mechanism against the adolescent ego. The turbulent group was found to be effective with children who had been categorized as "conformers" or "strivers," particularly in mathematics and science achievement where these teachers also excelled. They were ineffective with "opposers" and "waverers," two classroom types requiring interpersonal skills to which these teachers were totally indifferent.

Teachers in some of the elite liberal arts colleges appear to be especially effective in motivating students toward higher academic achievement. Knapp and Greenbaum¹ attributed the high productivity of scholars and scientists from these schools to the intellectual atmosphere to which the students were exposed. Dressel and Mayhew² have noted that schools which go the farthest in reducing authoritarian

¹R.H. Knapp and J.J. Greenbaum, The Younger American Scholar: His Collegiate Origins (Chicago: University of Chicago Press, 1952).

²P.L. Dressel and L.B. Mayhew, General Education: Explorations in Education (Washington: American Council on Education, 1954).

attitudes and increasing critical thinking as measured by high gains in scores on the Inventory of Beliefs and Critical Thinking in the Social Sciences have particular characteristics which help to maximize their focus on the student: 1) they are residential, 2) they are based on integral general education programs with full administrative support, and 3) they give primary emphasis to the intellectual growth of the students.

In each of the following studies teacher influence on pupil achievement and productivity was identified. In a study by Ryans,¹ it was reported that a high positive relationship existed between pupil productivity and teacher behaviors characterized as "understanding," "friendly," "organized," and "businesslike."

Davidson and Lang² reported a positive relation between children's perceptions of their teacher's feelings toward them and their own self-perception and academic achievement and desirable classroom behavior.

Anderson³ related teacher morals variable to the total

¹D.R. Ryans, "Some Relationships Between Pupil Behavior and Certain Teacher Characteristics," Journal of Educational Psychology, LII (April, 1961), 83-90.

²H.H. Davidson and G. Lang, "Children's Perceptions of their Teacher's Feelings Toward them Related to Self-Perception, School Achievement, and Behavior," Journal of Experimental Education, XXIX (December, 1960), 107-18.

³Lester W. Anderson, "Teacher Morale and Student Achievement," Journal of Educational Research, XLVI (1953), 693-98.

achievement scores of high schools in one state. He found real differences in the mean morale scores of teachers in high and low achieving groups of schools.

Christenson¹ reported a study which was concerned with pupil achievement as the dependent variable and pupil affected-need, teacher warmth and teacher permissiveness as the independent variable. Subjects included ten fifth grade classes of pupils, ten fourth grade classes of pupils and ten fourth grade teachers. A permissive scale, a cognitive affective scale and the Iowa Test of Basic Skills was used to collect the data. It was found that vocabulary and arithmetic growth were significantly greater for teachers high on the warmth scale. No significant relationships were obtained for Affect-need or Permissiveness and none of the interaction terms were significant.

Although relationships between teacher behavior and student achievement were found, it may be noted that the studies were based upon individual teachers and their classes. The effect of teacher personality was substantiated but the

¹C. M. Christenson, "Relationships Between Pupil Achievement, Pupil Affect-Need, Teacher Warmth and Teacher Permissiveness," Journal of Educational Psychology, LI (June, 1960), 169-74.

influence of the organizational structure was not measured. However, recent development of the Organizational Climate Description Questionnaire has led to investigations of relationships between organizational climate and pupil achievement.¹ With the ability now to measure personality need and organizational press in comparable terms,² one is given the opportunity to investigate the impact of school culture on achievement more fully.

Socio-Economic Level

It is evident from the literature that socio-economic variables have a pervasive influence on pupil achievement. Havinghurst found a correlation between social status and school achievement.³ He reported that high school achievement (rank) is closely related to a composite of family background (social class), intelligence and personal social adjustment. Although social class did not account for all achievement, all of the other factors associated with achievement were also closely associated with social class.

Bloom identified a number of social economic characteristics as closely related to achievement as measured

¹Alexander Feldvebel, "The Relationship Between Socio-Economic Status of the School Patrons, Organizational Climate in the School, and Pupil Achievement Level" (unpublished Ph. D. dissertation).

²Steinhoff, op. cit., p. 95.

³Robert J. Havinghurst, et. al., Growing Up in River City (New York: John Wiley and Sons, Inc., 1962), pp. 38-39.

on the GED test.¹ He found a .70 correlation between achievement and "income per capita," among high school students.²

In a study conducted by Gerberich the socio-economic level of students was measured by the Gough Home Index, an instrument which measures style of life, income, occupation, and education as determinants of social class. Gerberich found a correlation of .437 between mean achievement and mean Home Index scores for students in fifty-five Connecticut towns.³

Another measure which is frequently employed in determining social class is the occupation of the subject. Thorndike's study which was conducted on the elementary school level reported the following relationships between occupational or career fields and achievement scores: persons /1000 in the professions (.25); male laborers /1000 (-.12).⁴

Davis noted that the relationship between socio-economic factors and educational performance is an outgrowth

¹ Benjamin S. Bloom, "The 1955 Normative Study of the Tests of General Educational Development," School Review, LXIV, No. 2 (February, 1956), 110-24.

² Ibid., pp. 204-21.

³ J. R. Gerberich, Connecticut Citizen's Project 1955-1957 (Storrs, University of Connecticut: Bureau of Research Service, 1957), p. 3.

⁴ Robert L. Thorndike, "Community Variables as Predictors of Intelligence and Academic Achievement," Journal of Educational Psychology, XLII (October, 1951), 321-38.

of social class values. Various tests employed to identify and classify students reflect the cultural bias of the school.¹

In a recent study by Sexton of a large midwestern city, it was found that the socio-economic level of student greatly influenced the achievement level as measured by standardized tests. As the learner advanced from grade to grade, the child from the lower socio-economic background began to fall further and further behind on the achievement examinations. On the other hand, students from middle and upper class backgrounds seemed to do much better on the same standardized tests of achievement.²

In Feldvebel's investigation concerning the relationships between organizational climate, pupil achievement and pupil socio-economic level, it was replicated that the socio-economic level of the student was related to pupil achievement.³ Although we do not know the precise way in which social class becomes involved in school achievement, there is strong evidence of a close relationship. Furthermore, Feldvebel concluded that although there

¹Allison Davis, Social Class Influence Upon Learning (Cambridge: Harvard University Press, 1948).

²Patricia Cayo Sexton, Income and Education (New York: Viking Press, 1961).

³Feldvebel, op. cit., p. 20.

was an absence of a relationship between the global concept of climate and social class that certain characteristics of the principal's behavior was related to this variable and suggests that he is more closely identified with the community values than is the total organization. This study will seek in part to extend these findings to test if culture and social class are related.

Adaptive Behavior

Pupils and teachers are capable of adapting their environment. One adaptation is to accept the environment and the concomitant dissatisfaction, stress and lower mental health that may be associated with it. On the other hand, people also are capable of modifying their world so that they can express some of their frustrations, decrease them, or partially avoid them.¹

By expressing their frustrations, the individuals may resort to adaptive activities which may be antagonistic to the organization. These behaviors are exhibited as a result of incongruence between the individual's expectations and the realities of the situation.²

¹Chris Argyris, Integrating the Individual and the Organization (New York: John Wiley and Sons, Inc., 1964), p. 59.

²Ibid.

In an environment characterized by rigidity, specialization, tight control, and directive leadership, Argyris hypothesized that the employee would become more antagonistic and would adapt to the situation through devices such as absenteeism and turnover.¹

In the present investigation the above mentioned modes of adaption were studies for pupils and teachers. Since much of the literature relating to absenteeism and turnover comes from industrial research, information from this area as well as education has been presented.

Absenteeism and Turnover

Industrial researchers have developed a number of theories to analyze the behavior of employees within the organizational setting. One such theory which seems relevant to our discussion of absenteeism and turnover is the Barnard-Simon theory of organizational equilibrium. In this theory an analysis of the motivational forces within an organization which can "induce" its members to continue their "participation" and hence to assure organizational survival was undertaken. Five key propositions summarize

¹Ibid.

this phenomenon.

1. An organization is a system of interrelated social behaviors of a number of persons whom we shall call the participants in the organization.
2. Each participant and each group of participants receives from the organization inducements in return for which he makes to the organization contributions.
3. Each participant will continue his participation in an organization only so long as the inducements offered him are as great or greater (measured in terms of his values and in terms of the alternatives open to him) than the contributions he is asked to make.
4. The contributions provided by the various groups of participants are the source from which the organization manufactures the inducements offered to participants.
5. Hence, an organization is "solvent"--and will continue in existence--only so long as the contributions are sufficient to provide inducements in large enough measure to draw forth these contributions.¹

The theory reveals that with increase in the balance of inducement utilities over contribution utilities the individual propensity to leave the organization is decreased, whereas decreases in that balance have an opposite effect.

A balance may be reached between inducements and contributions which serves to keep employees within the

¹Herbert A. Simon, D.W. Smithburg, and V.A. Thompson, Public Administration (New York: John Wiley and Sons, Inc., 1950), pp. 381-82.

organization. This balance is made up of two major components: the perceived desirability of leaving the organization and the perceived ease of movement from the organization.¹ The satisfaction (or motivation to withdraw) factor is a general one that holds for both absences and turnover. Differences between absences and turnover stem not from differences in the factors inducing the initial impulse but primarily from differences in the consequences of the alternative forms of withdrawal. The perceived ease of withdrawal from the organization, on the other hand, frequently is quite different for permanent withdrawal than for absenteeism.²

Research on the factors associated with employee motivation to leave an organization suggests that the primary factor influencing this motivation is employee satisfaction with the job as defined by him.³ The greater the individual's satisfaction with the job, the less the perceived desirability of movement. However, when dissatisfaction occurs the employee may begin to expand his program for exploring alternatives. In order to probe job dissatisfaction, a fairly wide range of job characteristics

¹James G. March and Herbert A. Simon, Organizations (New York: John Wiley and Sons, Inc., 1963), p. 85.

²Ibid.

³Ibid., p. 94.

needs examination since individual discontent with employment may reflect any of a number of relatively distinct aspects of the job. Three major propositions developed by March and Simon seem to take into account many of these vital characteristics:

1. The greater the conformity of the job characteristics and the self-characterization held by the individual the higher the level of satisfaction. Dissatisfaction arises from a disparity between reality and the ego-ideal held by the individual. The greater the disparity, the more pronounced the desire to escape from the situation.
2. The greater the predictability of instrumental relationships on the job, the higher the level of satisfaction. Ability to predict in the work situation is valued in most relationships.
3. The greater the compatibility of work requirements with the requirements of other roles, the higher the level of satisfaction. As Curle has pointed out, one of the major reasons for interpersonal differences in work satisfaction is that groups in a society do not always make mutually compatible demands on the individual worker. One would predict that an organizational participant would try to select his group membership so as to keep at a low level the conflict imposed by differences in the demands made upon him.¹

It would appear from these postulates that the individual is seeking psychological security in his position.

¹Ibid., pp. 94-95.

He is also concerned with his interpersonal relations and his role in the informal as well as the formal organization. When his expectations and the realities of the position vary to any great degree, adaptive behavior may take place.

Empirical data relating to variation in the congruence of work demands with the employee's self-characterization have revealed three significant types of individual evaluation of self: 1) estimates of one's independence, 2) one's worth, and 3) one's specialized competencies or interests. The greater the consistency of supervisory practices with employee independence the less the conflict between job characteristics and self-image.¹ The findings of Reynolds and Shister also support this hypothesis. It was their contention that job dissatisfaction was an adverse conception of the independence and control of the work situation upon the employee.²

Studies have also been undertaken to analyze leadership behavior in relation to absenteeism and to turnover. Fleishman and Harris determined that the more the leader structures, directs, and controls the greater the probability

¹Ibid., p. 98.

²L.G. Reynolds and J. Shister, Job Horizons (New York: Harcourt Brace, 1949).

of turnover.¹ Similarly, directive leadership which, like the pyramidal structure, also creates dependency and subordination, has been related to absenteeism^{2,3} and to unfavorable job adjustment,⁴ where need fulfillment was found to be difficult. Paterson further demonstrated that absenteeism and accidents were related to "arbitrary" pressures that employees perceived management creating in order to "whip them into line." His data indicated that accidents may increase as the employees feelings of dependence, submissiveness, and frustration increase.⁵ It seems logical to conclude that as long as the individual desires independence in decision-making the more authoritarian the supervisory practices, the greater the dissatisfaction

¹ Edwin A. Fleishman and Edwin F. Harris, "Patterns of Leadership Behavior Related to Employee Grievances and Turnover," Department of Industrial Administration, Yale University, mimeographed, 1961.

² Michael Argyle, Godfrey Gardner, and Frank Coffee, "Supervisory Methods Related to Productivity, Absenteeism and Labor Turnover," Human Relations, XI, No. 1 (1958), 23-40.

³ Peter C. Reid, "Absenteeism--Industry's High Priced Headache," Supervisory Management, VIII, No. 10 (October, 1963), 9-13.

⁴ A. Lindquist, "Absenteeism and Job Turnover as Consequences of Unfavorable Job Adjustment," Acta Social, III, Nos. 2 and 3 (1958), 119-31.

⁵ T.T. Paterson, Glasgow Limited (London: Cambridge University Press, 1960), p. 198ff.

aroused and the greater the pressure to withdraw.^{1,2}

Literature in the field of education tends to concur by and large with industrial research in relation to absenteeism and turnover. The evidence seems to support the hypothesis that adaptive behavior in the public school results from an unfavorable adjustment between the individual and the social environment in which he is operating.

Research dealing with pupil absenteeism suggests that this behavior is symptomatic of an unfavorable adjustment to the school environment on the part of the learner.³ The typical absentee may be defined as an individual exposed to conditions and pressures which produce unfavorable attitudes toward the school.⁴ A number of conditions may induce this behavior, among them could be: low academic grades, unfavorable parental opinion, teachers who lack a sympathetic understanding of the adjustment problems confronting the individual or rigid academic standards established by the institution.⁵

¹N.C. Morse and E. Reimer, "Experimental Change of a Major Organizational Variable," Journal of Abnormal and Social Psychology, LII (1955), 120-29.

²N.C. Morse, "Satisfaction in the White Collar Job," Survey Research Center, University of Michigan, 1953.

³James. E. Greene, Sr., "Factors Associated with Absenteeism Among Students in Two Metropolitan High Schools," The Journal of Experimental Education, XXXI (Summer, 1963), 389-94.

⁴Ibid.

⁵Ibid.

In order to modify an unfavorable environment the pupil displays various types of adaptive behaviors. Carlson suggested that a continuum of adaptation exists from "receptive adaptation" to "drop-out adaptation."¹ The former mode of behavior was defined as an effective relationship between pupil and school in which the learner identified with the institution and proceeded to extract many productive things from it. The latter adaptation was the antithesis of the former, in which the student totally withdrew his participation from the organization.

Between these two extremes many other forms of behavior existed which were somewhat problematical for either the student or the school, or both. One such form of adaptation was defined as "situational retirement."² In this setting the learner was present physically but not mentally. To him school was a warm, quiet place where no one would bother him. His attendance was good and so was his general deportment. However, he rejected the intellectual stimulation which the school afforded.

¹Richard O. Carlson, "Environmental Constraints and Organizational Consequences: The Public School and its Clients," The Behavioral Sciences and Educational Administration, Sixty-third Yearbook of the National Society for the Study of Education, Part II (Chicago, Ill: University of Chicago Press, 1964), pp. 273-76.

²Ibid., p. 274.

Another form of adaptation quite unlike "situational retirement" was "rebellious adjustment."¹ The pupil rejected the school and what it had to offer and sought to test the limits of the situation to see how far he could go. As a result of this, he tended to create problems for school officials and his chances of maintaining this type of behavior over an extended period of time were unlikely. This expression of adaptation seemed to be a way station short of dropping out of school.

A third form of adaptation was one in which the student saw the school as a place to get "side-payments" which were not available elsewhere.² School was attended in order to gain benefits, such as a chance to participate in sports and interaction with the opposite sex. School work was accepted for the sake of these "side-payment" activities. It seemed interesting to note the commonalities between the industrial worker and the student in their adaptation to their social and working environments. One may generalize these findings to see a common behavioral thread weaving through various organizational milieus.

¹ Ibid.

² Ibid., p. 275.

The final area to be investigated relates to teacher adaptations to the environment. The discussion will be limited to the adaptive behaviors of absenteeism and turnover. Elsbree analyzed teacher turnover in New York State a number of years ago, however, some of his conclusions still seem relevant.¹ Of interest to the present study were the following conclusions:

1. The causes of turnover are diverse in character as to make a single remedy impracticable.
2. Three causes are responsible for more than half of the entire turnover, leaving for a better position, marriage, and dismissal.
3. The high rate of turnover is a reflection on the lack of opportunity for advancement within school systems.
4. The median service of a teacher in the turnover group was only 2 1/2 years in any one place.²

Some of these conclusions seem to hold true at the present time and several writers, such as Charters, have alluded to these issues as well as to shed light on other aspects of turnover not studied by Elsbree.³

¹Willard S. Elsbree, Teacher Turnover in the Cities and Villages of New York State (New York: Bureau of Publications, Teachers College, Columbia University, 1928), pp. 68-74.

²Ibid.

³W.W. Charters, Jr., "The Relation of Morale to Turnover Among Teachers," American Educational Research Journal, II, No. 3 (May, 1965), 163-73.

Significant findings have been uncovered in relation to job satisfaction, role expectation, and turnover. Kleinman found a significant positive correlation between knowledge of the beginning teacher about conditions and his satisfaction with his work.¹ Biddle, Twyman, and Rankin compared the role expectations of teachers, education students, and non-education students. They concluded that role distortion may be responsible for a substantial proportion of the high drop out rate during the first year of teaching.²

Three studies relating to role expectation indicated that the discrepancies between teacher attitudes and expectancies, on the one hand, and the actual conditions in the teacher profession, on the other, may contribute significantly to morale problems in the schools. Rettig and Pasamanick concluded that the actual status of teachers is related positively to job satisfaction but that their status aspirations are related negatively to it.³ Day found

¹ Lou Kleinman, "A New Dimension in Teacher Selection," Journal of Educational Sociology, XXXIV (September, 1960), 24-33.

² Bruce J. Biddle, Paschal J. Twyman, and Earl F. Rankin, "The Role of the Teacher and Occupational Choice," School Review, LXX (Summer, 1962), 191-206.

³ Salomon Rettig and Benjamin Pasamanick, "Status and Job Satisfaction of Public School Teachers," School and Society, LXXXIV (March 14, 1959), 113-16.

that a very marked change in attitudes occurred in beginning elementary teachers during their first six months of service.¹ On the other hand, Rabinowitz and Rosenbaum reported a similar change in elementary teachers who had taught three years. In both cases, the change was in the direction of increased authoritarian attitudes as measured by the Minnesota Teacher Attitude Inventory.²

A number of studies attempted to identify factors influencing teacher morale and job satisfaction. From a study involving 24 school systems and 5,000 teachers, Redefer found that a close relationship exists between morale and the quality of education present in individual schools.³ MacLaughlin and Shea found that working conditions are affected by excessive load, and negative pupil attitudes were a major source of job dissatisfaction.⁴ Reissman reported that schools which were located in lower social class neighborhoods had far greater teacher turnover than all other areas of the city. Teachers seemed to

¹ Harry P. Day, "Attitude Changes of Beginning Teachers After Initial Teaching Experience," Journal of Teacher Education, X (September, 1959), 326-28.

² William Rabinowitz and Ira Rosenbaum, "Teaching Experience and Teachers' Attitudes," Elementary School Journal, LX (March, 1960), 313-19.

³ Frederick L. Redefer, "Factors That Affect Teacher Morale," Nation's Schools, LXIII (February, 1959), 59-62.

⁴ Jack W. MacLaughlin and John T. Shea, "California Teachers' Job Dissatisfactions," California Journal of Educational Research, XI (November, 1960), 216-24.

prefer to teach "nice" children in "nice" schools in "nice" zones.¹ Principals from these slum schools continually reported that it was difficult to keep good teachers in the poorer areas of the city. Many teachers, especially women, were often afraid to teach in these schools and generally found the position less stimulating and less rewarding.

Other research has been concerned with interaction of teachers and administrators. Willower determined that principals holding a relaxed and non-directive view of their administrative function tended to hold a higher opinion of the professional status of teachers than did those principals who appeared to be somewhat unrelaxed and directive in their orientation.²

These studies have determined that the role expectancies, job satisfaction, and perceived leader behavior by teachers have an affect upon absenteeism and turnover. With this knowledge in mind, it would seem that the next logical step would be to measure the total impact

¹Frank Reissman, The Culturally Deprived Child (New York: Harper and Row Publishers, 1962), p. 17.

²Donald J. Willower, "Leadership Styles and Leaders' Perceptions of Subordinates," Journal of Educational Sociology, XXXIV (October, 1960), 58-64.

of the environment on these behaviors. It would appear that with the ability to measure the organizational culture a more lucid description of the impact of the organization upon its members will be forthcoming.

CHAPTER III

DESIGN, METHODOLOGY, AND TECHNIQUES

The major objective of this investigation was to assess the influence of school cultures on selected pupil and teacher adjustment indices. The study was designed to determine whether or not certain school cultures have influence on the pupils and teachers of that particular school. The degree and direction of any influence by the cultures has been identified. This was accomplished by comparison of culture scores and the selected variables.

The design of this study was essentially descriptive. It sought to extend Steinhoff's findings by examining pupil achievement, pupil absenteeism, teacher absenteeism, and teacher turnover in relation to empirical measures of culture. This was accomplished by collecting data on these four variables as well as the socio-economic levels of school neighborhoods and comparing it to the cultural scores of the various schools.

Two instruments designed to measure the interaction of organizational climate and individual personality

needs were used to categorize the schools into conventional, work, and impulse expression cultures. The rationale underlying this research design recognized that influences other than those emerging strictly from any single identified social climate have influence on individuals. That is, teachers and pupils are influenced by their social interactions outside of school; however, since they spend a great proportion of their time in school it was felt that this exposure would be an influencing factor in their lives.

Research Population

The teachers, administrators, and students of forty elementary, junior high, and senior high schools were involved in the descriptive study of a large urban public school system. Data concerning the organizational climate of forty-one schools were available but one school was removed from the sample because it served children with severe mental retardation, and it was felt that because of this atypical characteristic that the measurement of the variables to be investigated would be distorted.

Procedures

During the 1963-64 school year, Steinhoff conducted a study of Organizational Climate in a large urban school system. In the present study his data were related to selected pupil and teacher behaviors in each of the sample schools. Steinhoff obtained his data from the Organizational Climate Index, Form 1163 and the Activities Index.

During the Spring of 1965 contact was made with the Superintendent of schools of the system sampled by Steinhoff in order to gain cooperation in this follow-up study. After consultation with his administrative staff, consent was granted.

The investigator gained access to data relating to teacher absenteeism, teacher turnover, pupil absenteeism, and socio-economic level of school neighborhoods. Data concerning teacher absenteeism were obtained by examining the payroll department files which contained the attendance records of all staff members of the system. These reports were summarized for each building for the school year and are cited in Appendix F.

Information pertaining to teacher turnover was on file in the office of the Assistant Superintendent in charge of Personnel. After reading through board of education records and compiling a list of teachers who left their positions during the particular school year under study, the turnover percentage for each school was computed (Appendix G) and includes transfers to other buildings within the system as well as separation from the system.

Data concerning pupil absenteeism were obtained from the Pupil Personnel Office and were in the form of the standard state report. The data were compiled by individual school and summarized for the entire school year under study (Appendix E).

The socio-economic level of school neighborhoods was obtained through the use of the Socio-Economic Index developed by Willie. This composite contained the socio-economic level of each census tract within the city. In order to measure the socio-economic level of school neighborhoods, the area which each school served had to be defined, such information was available from the

Research Division of the school district. Once these data were obtained, a method of socio-economic classification for each school was developed after consultation with Willie. It was determined that if a school served more than one tract or part of a number of tracts, that one could measure, with reasonable accuracy, the socio-economic level of the school neighborhood by obtaining the mean score for all the census tracts that the school served (Appendix H). Throughout the fall and winter of 1965-66 data were collected concerning each of the above variables under consideration for the study.

Instrumentation

Standardized assessment devices were used to measure organizational climates and cultures and pupil achievement. A description of these instruments follows.

Characteristics of the Activities Index College Characteristics Index and the Organizational Climate Index

The Activities Index and the Organizational Climate Index each contain 300 items distributed among 30 scales of 10 items each. The AI scales parallel those of the OCI.

those of the former corresponding to behavioral manifestations of personality needs, those of the latter to environmental press conditions likely to facilitate or impede their expression.¹ The needs-press variables and their definitions are listed below:

Need-Press Scale Definitions

1. Abasement--Assurance: self-depreciation versus self-confidence
2. Achievement: striving for success through personal effort
3. Adaptability--Defensiveness: acceptance of criticism versus resistance to suggestion
4. Affiliation--Rejection: friendliness versus unfriendliness
5. Aggression--Blame Avoidance: hostility versus disorganization
6. Change--Sameness: flexibility versus routine
7. Conjunctivity--Disjunctivity: planfulness versus disorganization
8. Counteraction--Inferiority Avoidance: restraining after failure versus withdrawal
9. Deference--Restiveness: respect for authority versus rebelliousness
10. Dominance--Tolerance: ascendance versus forbearance

¹Stern, op. cit., 1963b, p. 1.

11. Ego Achievement: striving for power through social action
12. Emotionality--Placidity: expressiveness versus restraint
13. Energy--Passivity: effort versus inertia
14. Exhibitionism--Inferiority Avoidance: attention-seeking versus shyness
15. Fantasied Achievement: daydreams of extraordinary public recognition
16. Harm Avoidance--Risktaking: fearfulness versus thrill-seeking
17. Humanities--Social Sciences: interests in the Humanities and the Social Sciences
18. Impulsiveness--Deliberation: impetuosity versus reflection
19. Narcissism: vanity
20. Nurturance--Rejection: helping others versus indifference
21. Objectivity--Projectivity: detachment versus superstition (AI) or suspicion (EI)
22. Order--Disorder: compulsive organization of details versus carelessness
23. Play--Work: pleasure-seeking, versus purposefulness
24. Practicalness--Impracticalness: interest in practical activities versus indifference
25. Reflectiveness: introspective contemplation

26. Science: interest in the Natural Sciences
27. Sensuality--Puritanism: interest in sensory and esthetic experiences
28. Sexuality--Prudishness: heterosexual interests versus their inhibition
29. Supplication--Autonomy: dependency versus self-reliance
30. Understanding: intellectuality¹

AI-OCI Scale Characteristics

Studies by McFee,² Stern,³ and Saunders⁴ of the AI and CCI have shown that there is no relationship between the needs preferences a student records for himself and the press characteristics he attributes to the environment. There is enough similarity between the CCI and OCI to make the assumption that the same independence characterizes the relationship between the OCI and the AI

Factor Structure--AI⁵

Although the needs scale of the AI and the press scales of the CCI and OCI are uncorrelated and independent

¹Ibid., pp. 2-3.

²McFee, loc. cit.

³Stern, loc. cit., 1961.

⁴Saunders, loc. cit.

⁵All definitions pertaining to the AI on pages 56-61 are taken from Stern, 1963b, pp. 13-18.

of one another, there are certain important interscale relationships within each instrument.

Stern describes twelve first-order personality factors and four second-order personality factors which describe the total structure of the Activities Index.

The definitions and structure are listed below:

I. Intellectual Orientation

This dimension consists of five factors. Two of these involve, as might be expected, intellectual interests and achievement motivation. Two others are concerned with the maintenance of a high level of intellectual and social aggressiveness, suggesting that intellectuality is partially a function of ego strength. The last of these five factors is based primarily on items reflecting an interest in the development of useful, applied skills.

Factor 1. Self-Assertion. This factor reflects a need to achieve power and socio-political recognition. It is based on items which emphasize political action, directing or controlling other people, and the acceptance of roles involving considerable group attention. Score Sum:¹ Ego Achievement, Dominance, Exhibitionism, Fantasied Achievement.

Factor 2. Audacity--Timidity. The second factor is more personally than socially oriented. The emphasis here is on aggressiveness in both physical activities and in interpersonal relationships. It is of interest that this personal aggressiveness should also be associated with a high level of interest in science. Score Sum: Risktaking, Fantasied Achievement, Aggression, Science.

¹Score Sum. Each factor is composed of a number of need-press scales, each worth ten points, they are totaled to obtain the factor score sum. For example, factor 1 equals 40.

Factor 3. Intellectual Interests. The factors with the highest leadings in this dimension are based on items involving various forms of intellectual activities. These include interests in the arts as well as the sciences, both abstract and empirical. Score Sum: Reflectiveness, Humanities-Social Sciences, Understanding, Science.

Factor 4. Motivation. This factor, like 1 and 2 above, represents another form in which need achievement may be expressed. Here, however, are the more conventional forms of striving most recognizable among students, involving elements of competitiveness and perseverance as well as of intellectual aspiration. Score Sum: Achievement, Counteraction, Understanding, Energy.

Factor 5. Applied Interests. A high score on this factor suggests an interest in achieving success in concrete, tangible, socially acceptable activities. The items involve orderly and conventional applications in business and science. Score Sum: Practicalness, Science, Order.

II. Dependency Needs

This dimension is based on seven factors. It starts with the orderly aspects of Applied Interests, carries these to a more explicitly compulsive level of personal organization, and then shades off into Submissiveness. This in turn, when shorn of its more self-abasive qualities, becomes reconstituted in the last factor of this dimension as emotional Closeness. A high score suggests a generally high level of dependent, submissive, socially-controlled behavior. A low score represents the inverse of this: autonomy, ascendance, and non-conformity.

Factor 5. Applied Interests. See area I above.

Factor -11. Constraint-Expressiveness. This is the inverse of Factor 11 in area III below. Moderately high scores suggest guardedness and emotional constriction. Extreme scores are likely to be associated with high level of inhibition, defensiveness and rigidity. Score: 40-Factor 11 Score Sum.

Factor -12. Diffidence-Egoism. Reverse scores on Factor 12 (see area III below) reflect a lack of preoccupation with the self as a source of gratification. This implies good contact and reality testing, although a very high score may perhaps be associated with a tenuous, under-developed ego structure and a vague or obscurely-defined self-concept. Score: 30-Factor 12 Score Sum.

Factor 6. Orderliness. People with high scores on this factor have indicated a marked interest in activities stressing personal organization and deliberativeness. Although some of the items are concerned with long range planning and relatively high level time perspective, the major emphasis here is on the maintenance of ritual and routine and the avoidance of impulse behavior. Score Sum: Conjunctivity, Sameness, Order, Deliberation.

Factor 7. Submissiveness. The preceding factor suggests a strong defensive system, based on rigid internal controls, for guarding against the expression of impulses. The Submissiveness factor also implies a high level of control, but one which is based on social conformity and other-directedness. The items emphasize humility, deference, getting along with others, keeping in one's place, etc. It is of interest that the Nurturance scale items should appear in this context, suggesting that the submissive individual's interest in supportive activities is based to a considerable extent on his own unexpressed need for such help. Score Sum: Adaptability, Abasement, Nurturance, Deference.

Factor -2. Timidity-Audacity. This is the inverse of Factor 2 described previously under Intellectual Orientation. In its reversed form it suggests a concern with any risk of danger to the self, whether physical, psychological, or social. These people avoid sports, social activities, and even fantasies which might conceivably incur harm or blame. Score: 40-Factor 2 Score Sum.

Factor 8. Closeness. This factor is closely related to Factor 7, with which it shares both the Nurturance and Deference scales. However, the abusive and self-denying qualities implicit in Factor 7 are absent here. In their place is an acceptance of items which recognize one's needs for warmth and emotional supportiveness. Score Sum: Supplication, Sexuality, Nurturance, Deference.

III. Emotional Expression

This dimension shares the Closeness factor with the preceding area, but the remaining five factors with loadings on this dimension stress much high levels of social participation and emotional spontaneity. The last one of this group, Self-Assertion, is shared with the intellectual area, thus bringing the circle to a close (see Figure 1).

Factor 8. Closeness. See area II above.

Factor 9. Sensuousness. The thirty items associated with this factor are concerned with activities of a sensual character. The items suggest a measure of self-indulgence along with a delight in the gratifications which may be obtained through the senses. Score Sum: Sensuality, Narcissism, Sexuality.

Factor 10. Friendliness. Persons with high scores on this factor are indicating an interest in playful, friendly relationships with other people. These interests involve simple and uncomplicated forms of amusement enjoyed in a group setting. Score Sum: Affiliation, Play.

Factor 11. Expressiveness-Constraint. This factor stresses emotional stability and freedom from self-imposed controls. Individuals with high scores on this factor are outgoing, spontaneous, impulsive, and uninhibited. Score Sum: Emotionality, Impulsiveness, Exhibitionism, Sexuality.

Factor 12. Egoism-Diffidence. This factor reflects an extreme preoccupation with self. The items are concerned with appearance and comfort, as well as with fantasies in which the self obtains unusually high levels of gratification. The responses to other items in this group suggests that reality itself is interpreted in egocentric terms, but this may be not so much a matter of autistic distortion as of narcissistic egoism. Score Sum: Narcissism, Fantasied Achievement, Projectivity.

Factor 1. Self Assertion. See area I above.

IV. Educability

There is a fourth dimension to be extracted in this second-order space, of considerably less magnitude than the preceding three. It is of intrinsic interest to the educator, however, insofar as it combines elements of both intellectuality and submissiveness. As can be seen in Figure 1, it excludes the more self-assertive aspects of Intellectual Orientation on the other hand, and the most self-denying, inhibited aspects of Dependency Needs. Insofar as scores on this dimension reflect a strong interest in Intellectual activities, coupled with orderliness and conformity, it

seems likely that this factor is specifically associated with academic achievement. A score for this dimension may be obtained by summing the values for Factors (3) Intellectual Interests, (4) Motivation, (5) Applied Interests, (6) Orderliness, and (7) Submissiveness.

Factor Structure--CCI¹

The College Characteristics Index was the prototype of the OCI. Eleven factors associated with characteristics of college press have been derived. These factors were refactored in a two factor second-order structure delineated. The definitions and structures which follow are listed to aid in the describing of the subsequent analysis of the Organizational Climate Index:

I. Intellectual Climate

Eight of the eleven CCI factors covary together to define the over-all dimensions of the intellectual climate. Among them are represented the more conventional aspects of the academic program, including (a) staff and facilities, (b) standards of achievement set by students as well as faculty, and (c) opportunities for the development of self assurance. In addition to these three, the intellectual climate is also marked, as we shall see below, by (d) noncustodial student personnel practices and (e) an absence of vocationalism.

Factor -10. Work--Play. This is an inversion of factor 10 (see area II below). It reflects an

¹All definitions pertaining to the CCI on pages 59-64 were taken from Stern, 1963b, pp. 18-21.

absence of activities associated with dating, athletics, and other forms of collegiate play or amusement.

Factor -11. Non-Vocational Climate. This factor is also an inversion (see area II below). In its reversed form the items reflect opportunities to engage in theoretical, artistic, and other "impractical" activities. Other items imply an absence of expectation, coercion, or demands for student conformity to conventional values.

Factor 1. Aspiration Level. A high score on this factor indicates that the college encourages students to set high standards for themselves in a variety of ways. These include opportunities for students to participate in decision-making processes involving the administration of the school, and administrative receptivity to change and innovation, thus implying that a student's efforts to make some impact on his environment have some probability of being successful. But a high level of aspiration is also encouraged by introducing students to individuals and ideas likely to serve as models of intellectual and professional achievement. Score Sum: Counter-action, Change, Fantasied Achievement, Understanding.

Factor 2. Intellectual Climate. All of the various items contributing to this factor reflect the qualities of staff and plant specifically devoted to scholarly activities in the humanities, arts, and social sciences. Score Sum: Reflectiveness, Humanities-Social Sciences, Sensuality, Understanding, Fantasied Achievement.

Factor 3. Student Dignity. This factor is associated with institutional attempts to preserve student freedom and maximize personal responsibility. Schools with high scores on this factor tend to regulate student conduct by means other than legislative codes or administrative fiat. There is a minimum of coercion and students are generally treated

with the same level of respect accorded any mature adult. Score Sum: Objectivity, Assurance, Tolerance.

Factor 4. Academic Climate. This factor stresses academic excellence in staff and facilities in the conventional areas of the natural sciences, social sciences, and the humanities. Score Sum: Humanities-Social Sciences, Science.

Factor 5. Academic Achievement. Schools high in this factor set high standards of achievement for their students. Course work, examinations, honors, and similar devices are employed for this purpose. Score Sum: Achievement, Energy, Understanding, Counteraction, Conjunctivity.

Factor 6. Self-Expression. This last one of the factors in this area is concerned with opportunities offered to the students for the development of leadership potential and self assurance. Among the activities serving this purpose are public discussions and debates, projects, student drama and musical activities, and other forms of participation in highly visible activities. Score Sum: Ego Achievement, Emotionality, Exhibitionism, Energy.

II. Non-Intellectual Climate

This area shares the Self-Expression factor with the preceding one. The highest loadings, however, are connected with three factors involving a high level of organization of student affairs, both academic and social. The remaining two factors are associated with student play and an emphasis on technical and vocational courses.

Factor 7. Group Life. The four scales on this factor are concerned with various forms of mutually supportive group activities among the student body. These activities are of a warm, friendly character,

more or less typifying adolescent togetherness, but the items also reflect a more serious side to this culture as represented in activities devoted to the welfare of fellow students and less fortunate members of the community. Score Sum: Affiliation, Supplication, Nurturance, Adaptability.

Factor 8. Academic Organization. The various components of this factor may be regarded as the environmental counterparts for orderliness and submissiveness in the individual. High scores on this factor are achieved by institutions which stress a high degree of organization and structure in the academic environment. Score Sum: Blame Avoidance, Order, Conjunctivity, Deliberation, Deference, Narcissism.

Factor 9. Social Form. In some respects this factor represents the formal institutionalization of those activities represented in Factor 7 (Group Life). There is in fact considerable overlap between these two factors, but Factor 9 minimizes the friendly aspects of Factor 7 while stressing its welfare components. Schools characterized by this factor also offer opportunities for the development of social skills of a formal nature and in some respects suggest the finishing school counterpart of the vocational climate represented in Factor 11 below. Score Sum: Narcissism, Nurturance, Adaptability, Dominance, Play.

Factor 10. Work--Play. Schools high in this factor offer opportunities for participation in a form of collegiate life reminiscent of the popular culture of the 1920's. These are the institutions sometimes referred to as the fountains of knowledge where students gather to drink. Score Sum: Sexuality, Risktaking, Play, Impulsiveness.

Factor 11. Vocational Climate. The last of the non-intellectual factors is also shared with the Intellectual Climate area. The items of Factor 11

emphasize practical, applied activities, the rejection of esthetic experience, and a high level of orderliness and conformity in the student's relations to the faculty, his peer, and his studies. Score Sum: Practicalness, Puritanism, Deference, Order, Adaptiveness.

Factor Structure--OCI¹

Steinhoff carried on a factor analysis of the OCI data to determine the interscale relationships to the instrument. The responses to his population sample were intercorrelated and the resulting matrix was factored by a principal axis solution.

Six principal axis factors had eigenvalues approaching the value of unity or greater, and were submitted to an equamax rotational analysis devised by David Saunders and modified by Roger Coehn, Syracuse University Psychological Research Center, for the Syracuse University IBM 7074. The definition and structure of these factors (Table 1) are listed below.

1. Supportiveness

The first factor extracted in this analysis deals with aspects of the organization environment which reward, satisfy or support self-assured but dependent teachers. It would appear that this factor might be considered a measure of democratic paternalism.

¹All definitions pertaining to the OCI on pages 62-68 were taken from Steinhoff, 1965, pp. 42-51.

TABLE 1

EQUAMAX ROTATION, ORGANIZATIONAL CLIMATE
INDEX, 6 FACTOR SOLUTION

Variable	Factor Loadings						COM ^a
	1	2	3	4	5	6	
1	<u>-722</u>	-038	063	037	-373	-051	669
2	<u>227</u>	-195	221	-278	<u>582</u>	176	585
3	159	097	<u>609</u>	-196	<u>326</u>	224	600
4	<u>567</u>	340	<u>159</u>	-287	147	<u>351</u>	689
5	<u>-507</u>	<u>508</u>	-292	245	041	-216	709
6	<u>-032</u>	<u>333</u>	-053	<u>-386</u>	<u>371</u>	023	402
7	<u>535</u>	-142	<u>521</u>	-183	257	175	708
8	<u>269</u>	236	<u>043</u>	-112	<u>671</u>	126	608
9	143	-385	<u>476</u>	-105	-117	183	453
10	<u>-720</u>	291	<u>169</u>	140	-061	-087	622
11	<u>106</u>	174	060	<u>-456</u>	<u>417</u>	180	460
12	129	<u>442</u>	-052	<u>-181</u>	<u>444</u>	154	469
13	130	-116	246	-273	<u>650</u>	265	659
14	178	<u>430</u>	223	<u>-433</u>	170	309	579
15	-069	<u>333</u>	035	<u>-567</u>	233	173	522
16	<u>473</u>	-098	<u>485</u>	-034	096	083	486
17	<u>233</u>	-071	<u>195</u>	<u>-735</u>	224	204	730
18	086	<u>489</u>	-298	<u>-132</u>	288	157	460
19	-003	<u>013</u>	<u>683</u>	-185	064	135	523
20	<u>404</u>	-018	<u>286</u>	-308	296	<u>374</u>	568
21	<u>714</u>	-082	146	-232	335	<u>246</u>	764
22	<u>-168</u>	-127	<u>758</u>	041	020	084	628
23	056	<u>760</u>	-038	004	-317	014	683
24	-109	-030	051	073	-009	<u>948</u>	921
25	188	144	197	<u>-704</u>	344	<u>181</u>	742
26	154	036	219	<u>-723</u>	255	224	711
27	327	112	117	<u>-536</u>	074	310	521
28	-259	<u>615</u>	-039	<u>-101</u>	094	-025	467
29	<u>541</u>	<u>134</u>	252	-120	220	297	525
30	<u>264</u>	036	167	<u>-665</u>	<u>347</u>	188	697

^aThis represents a composite of the six factor solution.

	Scale	Factor Loading
<u>Assurance</u>	self-confidence	.722
<u>Tolerance</u>	forbearance	.720
<u>Objectivity</u>	detachment	.714
<u>Affiliation</u>	friendliness	.567
<u>Supplication</u>	dependency on others	.514
<u>Blame Avoidance</u>	inhibition of hostility	.507
<u>Harm Avoidance</u>	fearfulness	.473
<u>Nurturance</u>	helping others	.404

2. Impulse Expression

The scales listed below combine to form a measure of social aggressiveness. Schools high in this factor evidently offer no impediment to the social preoccupations of teachers and present them with the opportunity for impulsive self-expression, even though it might take the form of personal indulgence or be challenging to the formal organization.

	Scale	Factor Loadings
<u>Play</u>	pleasure seeking	.760
<u>Sexuality</u>	heterosexual interests	.615
<u>Aggression</u>	hostility	.508
<u>Impulsiveness</u>	impetuosity	.489
<u>Emotionality</u>	expressiveness	.442
<u>Exhibitionism</u>	attention-seeking	.430
<u>Restiveness</u>	rebelliousness	.385

3. Organization

The components of this factor are concerned with the press for organizational order, structure, and respect for authority. Conformity and concern with maintaining a proper image also characterize schools high in this factor.

	Scale	Factor Loading
<u>Order</u>	organization of details	.758
<u>Narcissism</u>	vanity	.683
<u>Adaptability</u>	acceptance of criticism	.609
<u>Conjunctivity</u>	planfulness	.521
<u>Harm Avoidance</u>	fearfulness	.485
<u>Deference</u>	respect for authority	.476

4. Intellectuality

The scales contributing to this factor deal with the aspects of an environment concerned with intellectual activities and individual achievement.

	Scale	Factor Loadings
<u>Humanities, Social Science</u>	- activities in the humanities and social sciences	.735
<u>Science</u>	- activities in natural sciences	.723
<u>Reflectiveness</u>	- introspective contemplation	.704
<u>Understanding</u>	- intellectuality	.665
<u>Fantasied Achievement</u>	- daydreams of extraordinary public recognition	.567
<u>Sensuality</u>	- sensory and esthetic experience	.536
<u>Exhibitionism</u>	- attention seeking	.433
<u>Ego-Achievement</u>	- striving for power through social action	.456
<u>Change</u>	- flexibility	.386

5. Motivation

The factor describes the extent to which a school is characterized by a press toward achievement. Schools high in this factor stress hard work, a total commitment to day-to-day activities, and perseverance.

Scale		Factor Loading
<u>Counteraction</u>	- restraining after failure	.671
<u>Energy</u>	- effort	.650
<u>Achievement</u>	- striving for success through personal effort	.582
<u>Emotionality</u>	- expressiveness	.444
<u>Ego-Achievement</u>	- striving for power through social action	.417
<u>Assurance</u>	- self confidence	.373
<u>Change</u>	- flexibility	.371
<u>Understanding</u>	- intellectuality	.347

6. Practicalness

A school high in this factor would be characterized by a practical and friendly environment.

Scale		Factor Loading
<u>Practicalness</u>	- practical activities	.948
<u>Nurturance</u>	- helping others	.374
<u>Affiliation</u>	- friendliness	.351

A comparison of the factors extracted in the present study with those described by Stern for the CCI seem to indicate that there is considerable similarity between the two analyses. OCI factors one through five have their counterparts among eight of the CCI factors (see Table 2). OCI Factor 6 appears to be an original one, however.

TABLE 2
COMPARISON OF FACTORS--OCI-CCI

<u>OCI</u>		<u>CCI</u>
1		3, 7
2		10
3		8
4		2
5		1, 5, 6
6		--

It should also be noted that an as yet unpublished factor analysis of the Peace Corps OCI data by Stern and Cohen extracted essentially the same first five factors that emerged in the present study. As Stern predicted (Stern, 1963, p. 13), the environmental factors concerned with intellectual aspects of these organizations accounted for less variance than did the college studies, while more variance was associated with those aspects of the environment concerned with dependency.

Pupil Achievement Measures

Iowa Tests of Basic Skills

According to Remmers:

No battery of achievement tests intended for civilian use has ever been constructed with greater technical sophistication, greater adequacy of statistical base, and greater use of previous research.¹

The Iowa Tests of Basic Skills were developed under the direction of E. F. Lindquist and A. N. Hieronymus and are available through the Houghton-Mifflin Company of Boston, Massachusetts.

The tests are designed to measure the functional skills of pupils three through nine in the areas of vocabulary, reading comprehension, language skills, work skills, and arithmetic. The vocabulary test is placed first in order to start a child with a test which is easy

¹H. H. Remmers (Reviewer), "Iowa Tests of Basic Skills," Fifth Mental Measurements Yearbook (Highland Park, N.J.: Gryphon Press, 1959), p. 31.

to take from a mechanics viewpoint and which is not directly related to specific instructions. The test of reading comprehension is designed to evaluate specific comprehension skills involved in grasping details and purpose, analyzing organization and evaluating a reading selection. The language skills tests cover the four areas of spelling, capitalization, punctuation, and usage. The basic type of item used is the "find the error" question. This format permits the presentation of a large number of choice situations and has high reliability. The section on work study skills attempts to measure an area not taught formally as a subject in elementary school. The arithmetic section is divided into two parts--arithmetic concepts and problem solving. The section on concepts deals more with the content of arithmetic than with intellectual skills. The problem solving subtest measures the functional skill involved in the area of arithmetic.

A major strength of the battery is its curricular validation. Extremely careful identification and definition of the skill processes being tested were done before test items were designed. The curricular analyses are found

in the Teachers Manual and help teachers plan remedial or corrective instruction following evaluation. Reliability was gained by making the tests long enough to permit drawing inferences about individual pupils without regard to the consequent length of the complete battery. The reliability coefficients range from .84 to .96 for the subtests and .98 for the whole test.¹

Every effort was made to get a representative sample of all public school children in grades three through nine in the United States. This population ranged from 11,000 to 13,000 children per grade and constituted a very comprehensive sampling. This comprehensive base may increase the user's confidence in the standardization of test items and the stability and representativeness of the norms.

Iowa Test of Educational Development

The ITED is one of the most widely used measures of achievement on the current scene. According to the 1962 prospectus for the centrally scored edition, the battery has been used to test one and a half million

¹Herricks, op. cit., p. 31

pupils. The instrument is published by the Science Research Associates, Incorporated of Chicago, Illinois.

The battery is composed of nine tests which draw on the subject matter of four broad curricular areas: social studies, natural sciences, general mathematics, and English. Social studies is represented by two tests: a 90-item conventional test called Understanding of Basic Social Concepts and an 80-item reading test called Ability to Interpret Reading Materials in the Social Studies. Two parallel tests represent natural sciences, each with the same respective number of items. The single mathematics test consists of 53 problems and is called Ability to Do Quantitative Thinking. English is broadly represented by tests of Correctness and Appropriateness of Expression containing 99 items, Ability to Interpret Literary Materials consisting of 80 items, General Vocabulary with 75 items and Use of Sources of Information including 60 items. A composite score is compiled from the scores of the first eight tests while the last test is deleted.

The 1960 edition of the battery marks the advent of two new forms of the ITED, X-4, and Y-4. These were developed with completely new items in an effort to modernize the test content. Items were selected with a number of statistical considerations to assure that the two forms were equivalent and fairly comparable in interpretation with previous editions of the test. The publishers also state that the tests do not measure the outcome of taking specific courses, but rather what a student has learned in school and throughout his educational career.

The predictive validity of the tests rests upon the correlation of prior editions of the ITED with later school and college success. Tables are provided which show correlations from the .40's to the .70's or higher between ITED composite scores and rank in high school graduating class, average high school grades in specific courses, high school grade-point averages and college freshman grades. Within-grade split-half reliabilities for all the tests reported, ranged in the .80's and

.90's with reliabilities for the composite reaching or striking .98 or .99.¹

The percentile norms for the new SRA-scored editions are based upon a nation-wide testing in the Fall of 1962. Norms for the school scored forms are based on 1957 testing. The population sampled includes all students in grades nine through twelve in regular daily attendance at public high schools throughout the continental United States, regardless of the form of these schools (four year or various junior high and senior high arrangements). This population was stratified by region and size of student body and then sampled randomly within strata. In this way 136 school systems were tested in 39 states, contributing 51,098 students. This is slightly under the sample of 1 per cent per stratifying category which the publishers had originally sought, but seems a most respectable sample for reasonable purposes. Where certain types of public schools were not represented in true proportion to the total population, the sample was statistically augmented or reduced to adjust the norms accurately.

¹Ellis Batten Page (Reviewer), "Iowa Tests of Educational Development," Sixth Mental Measurements Yearbook (Highland Park, N.J.: Gryphon Press, 1965), pp. 49-51.

In summary, the ITED is a modern battery of subject area tests designed in conformity with good cannons of test construction, supplied with high quality norms and statistical information and reported in an easily disseminable and usable form. With some reservations about profile differences, it measures very well.¹

Analysis of Data

For schools representative of each culture on intercorrelation analysis was employed. T-tests were used to compare schools of each culture which were excessively influenced by either the AI or OCI factors to schools which were considered to be homogeneous in nature for each culture.

¹Ibid., p. 51.

CHAPTER IV

FINDINGS

The questions which this study attempted to answer concerned the relationships of selected pupil and teacher behaviors and school culture. This chapter will include an analysis of the culture scores and will then present findings relating to these scores and the various behaviors under investigation.

The relationships between the teacher and pupil behaviors and the cultures were examined by intercorrelation techniques and by testing the difference between means of homogeneous and deviant schools within each culture.

Organizational Culture Analysis Process

In an attempt to discover the overall needs-pressure relationships among schools, Steinhoff utilized a correlation matrix of AI/OCI matched factor responses for the 41 schools under investigation (Table 3). In Table 3 the kinds of climate in which each particular teacher personality

TABLE 3

FACTOR INTERCORRELATIONS BETWEEN THE AI AND OCI FOR FORTY-ONE SCHOOLS^a

AI Factors	OCI Factors				
	Supportive- ness	Impulse Expression	Organiza- tion	Intellec- tual tuality	Motiva- tion Practical- ness
1. Self Assertion	-728	506	-591	-091	-309
2. Audacity-Timidty	-708	452	-538	-030	-215
3. Intellectual Interests	-226	100	-099	244	081
4. Motivation	-472	266	-371	134	-035
5. Applied Interests	-051	183	125	469	249
6. Orderliness	420	-208	405	311	339
7. Submissiveness	340	-160	392	242	436
8. Closeness	340	-003	404	223	269
9. Sensuousness	-077	242	082	069	-036
10. Friendliness	-116	-005	-008	016	-140
11. Expressiveness- Constraint	-587	414	-425	-207	-292
12. Egoism-Diffidence	-427	497	-270	-047	-225
					-481
					-319

^aCarl R. Steinhoff, Organizational Climate in a Public School System (Washington: U. S. Department of Health, Education, and Welfare, 1965), p. 90.

characteristic is maximized are indicated by reading across the rows of the table, while the kinds of teachers to be found in any of the six climates are defined down the columns. For example, schools characterized by a high press in supportiveness have staffs with low needs in self-assertion, audacity, motivation, and expressiveness. Similar interpretations can be made for each of the remaining rows and columns of the table.

The matrix was then subjected to a principal axis factor analysis. The unrotated factors with eigenvalues approaching unity or greater are presented in Table 4. Those factors were then analyzed by use of an equimax rotational analysis to obtain a sharper picture of needs-press relationships (Table 5).

By use of this analysis, Steinhoff extracted five factors for further investigation. It was noted, however, that factor two was associated with all of the OCI, differentiating it in its entirety from the AI, while factor five was concerned only with three AI variables of a generalized teacher personality attitude regarding friendliness, warmth, and permissive acceptance.

TABLE 4

PRINCIPAL AXIS FACTOR ANALYSIS AI-OCI
FOR FORTY-ONE MATCHED SCHOOLS^a

	1	2	3	4	5	Total
<u>AI</u>						
1. Self assertion	-894	299	000	035	093	
2. Audacity-Timidity	-837	369	-305	032	107	
3. Intellectual Interests	-416	719	-240	-363	054	
4. Motivation	-525	483	-581	-078	007	
5. Applied Interests	-124	775	-348	-206	-164	
6. Orderliness	585	274	-260	-237	-457	
7. Submissiveness	345	485	107	-467	-138	
8. Closeness	206	358	806	-259	-094	
9. Sensuousness	-265	232	852	-016	-189	
10. Friendliness	-221	208	425	-406	581	
11. Expressiveness	-771	117	445	044	042	
12. Ego-Diffidence	-582	161	581	195	-268	
<u>OCI</u>						
13. Supportiveness	904	179	140	046	140	
14. Impulse Expression	-431	381	110	689	-127	
15. Organization	752	287	219	-136	052	
16. Intellectuality	393	769	000	388	143	
17. Motivation	551	609	011	342	016	
18. Practicalness	721	365	-004	365	252	
Eigenvalue	6.07	3.51	2.90	1.63	.87	
Percent variance	34	19	16	9	5	83

^aSteinhoff, op. cit., p. 92.

Steinhoff concludes

the appearance of these separate factors specific to each instrument in this joint factor space as distinct entities again testifies to the independence of the instruments.

TABLE 5

COMBINED AI-OCI ROTATION FOR FORTY-ONE
SCHOOLS, 5 FACTOR SOLUTION^a

Variable		Factor Loadings ^b					COM
		1	2	3	4	5	
<u>AI</u>							
1.	Self Assertion	-647	-254	422	-427	232	898
2.	Audacity-Timidity	<u>-818</u>	-200	189	-430	111	943
3.	Intellectual Interests	<u>-883</u>	020	084	188	244	882
4.	Motivation	<u>-898</u>	-069	-095	-166	-075	853
5.	Applied Interests	<u>-805</u>	223	025	321	-077	807
6.	Orderliness	-075	210	-228	<u>688</u>	-419	750
7.	Submissiveness	-190	202	010	<u>710</u>	147	603
8.	Closeness	213	220	<u>575</u>	<u>557</u>	402	896
9.	Sensuousness	124	-004	<u>867</u>	163	304	886
10.	Friendliness	-099	-015	123	050	864	774
11.	Expressiveness	-239	-277	<u>669</u>	331	343	809
12.	Egoism-Diffidence	-087	-148	<u>865</u>	-172	076	813
<u>OCI</u>							
13.	Supportiveness	<u>419</u>	663	-273	<u>447</u>	026	890
14.	Impulse Expression	-300	330	<u>578</u>	<u>-495</u>	-235	834
15.	Organization	273	533	-130	<u>574</u>	109	717
16.	Intellectuality	-248	915	077	113	-032	918
17.	Motivation	-065	844	017	230	-147	792
18.	Practicalness	189	865	-221	126	-040	851

^a Ibid., p. 93.

^b Underlined loadings represent the input variables selected for scoring the joint AI-OCI factors.

Culture Scores

Since the focus of this study lies in the joint factors, factors two and five were disregarded. The three other factors with joint loadings were then investigated because they represented the combined personal and situational components of behavior in each setting and thus described what can be deemed the organizational culture. These relationships identified in the factor structure represented organizational rather than either environmental or personal relationships alone and therefore, will give a more complete picture of the institution. The three cultures derived from this analysis were defined as conventional, work, and impulse expression cultures. A more detailed description of each culture was presented in Chapter II (see pp. 23-24).

In order to rank the schools of the sample, the combined factor scores which comprised each culture were summed. For example, Self-Assertion, Audacity-Timidity, Intellectual Interests, Motivation, and Applied Interests of the AI factors and Supportiveness from the OCI were

summed for each school to obtain the conventional culture scores presented in Table 6.¹

Work culture scores were obtained by summing the AI factors of Self-Assertion, Audacity-Timidity, Orderliness, Submissiveness, and Closeness and the OCI factors of Supportiveness, Impulse Expression, and Organization for each school (Table 7.)²

Scores for the Impulse Expression Culture were obtained in a similar fashion by summing the AI factors of Self-Assertion, Closeness, Sensuousness, Expressiveness, and Ego-Diffidence and the OCI factor of Impulse Expression (Table 8).³

Contributions of AI and OCI
Factors to Culture Scores

The culture scores are composed of both personality needs of teachers as represented by AI scores and institutional press as expressed by scores on the OCI. With scores available for each of these dimensions, one is afforded the opportunity to analyze the relative contribution of each dimension for each culture thereby

¹The terms conventional culture and Culture I are synonymous.

²The terms work culture and Culture II are synonymous.

³The terms impulse culture and Culture III are synonymous.

TABLE 6

COMBINED AI-OCI FACTOR SCORES
CULTURE I

School		Culture I Score									
1.	6E1	.	.	.	.	.	.	.	.	.	177.43
2.	12E1	.	.	.	.	.	.	.	.	.	175.88
3.	24E1	.	.	.	.	.	.	.	.	.	175.15
4.	7E1	.	.	.	.	.	.	.	.	.	174.99
5.	11E1	.	.	.	.	.	.	.	.	.	172.84
6.	10E1	.	.	.	.	.	.	.	.	.	172.80
7.	5E1	.	.	.	.	.	.	.	.	.	171.33
8.	22E1	.	.	.	.	.	.	.	.	.	171.17
9.	16E1	.	.	.	.	.	.	.	.	.	169.24
10.	1E1	.	.	.	.	.	.	.	.	.	168.93
11.	25E1	.	.	.	.	.	.	.	.	.	168.80
12.	2E1	.	.	.	.	.	.	.	.	.	168.55
13.	15E1	.	.	.	.	.	.	.	.	.	167.28
14.	8E1	.	.	.	.	.	.	.	.	.	164.47
15.	13E1	.	.	.	.	.	.	.	.	.	162.69
16.	19E1	.	.	.	.	.	.	.	.	.	161.77
17.	34C	.	.	.	.	.	.	.	.	.	161.43
18.	17E1	.	.	.	.	.	.	.	.	.	161.27
19.	20E1	.	.	.	.	.	.	.	.	.	160.76
20.	4E1	.	.	.	.	.	.	.	.	.	160.63
21.	9E1	.	.	.	.	.	.	.	.	.	160.23
22.	3E1	.	.	.	.	.	.	.	.	.	160.07
23.	21E1	.	.	.	.	.	.	.	.	.	159.57
24.	36C	.	.	.	.	.	.	.	.	.	157.52
25.	26JH	.	.	.	.	.	.	.	.	.	156.70
26.	28JH	.	.	.	.	.	.	.	.	.	154.43
27.	14E1	.	.	.	.	.	.	.	.	.	154.39
28.	18E1	.	.	.	.	.	.	.	.	.	153.96
29.	31JH	.	.	.	.	.	.	.	.	.	153.77
30.	32C	.	.	.	.	.	.	.	.	.	152.66
31.	33C	.	.	.	.	.	.	.	.	.	152.65
32.	35C	.	.	.	.	.	.	.	.	.	152.11
33.	39SH	.	.	.	.	.	.	.	.	.	151.08
34.	27JH	.	.	.	.	.	.	.	.	.	147.50
35.	38SH	.	.	.	.	.	.	.	.	.	143.68
36.	41SH	.	.	.	.	.	.	.	.	.	142.02
37.	29JH	.	.	.	.	.	.	.	.	.	139.77
38.	37SH	.	.	.	.	.	.	.	.	.	139.30
39.	40SH	.	.	.	.	.	.	.	.	.	134.84
40.	30JH	.	.	.	.	.	.	.	.	.	131.75

M= 159.14

 $\sigma = 11.6$

TABLE 7

93

COMBINED AI-OCI FACTOR SCORES
CULTURE II

School		Culture II Scores									
1.	6E1	.	.	.	.	.	.	.	.	.	287.43
2.	15E1	.	.	.	.	.	.	.	.	.	285.54
3.	12E1	.	.	.	.	.	.	.	.	.	284.92
4.	5E1	.	.	.	.	.	.	.	.	.	282.33
5.	18E1	.	.	.	.	.	.	.	.	.	282.14
6.	22E1	.	.	.	.	.	.	.	.	.	281.91
7.	24E1	.	.	.	.	.	.	.	.	.	279.45
8.	2E1	.	.	.	.	.	.	.	.	.	279.35
9.	11E1	.	.	.	.	.	.	.	.	.	279.04
10.	4E1	.	.	.	.	.	.	.	.	.	277.85
11.	8E1	.	.	.	.	.	.	.	.	.	275.91
12.	19E1	.	.	.	.	.	.	.	.	.	275.41
13.	1E1	.	.	.	.	.	.	.	.	.	275.28
14.	14E1	.	.	.	.	.	.	.	.	.	274.70
15.	21E1	.	.	.	.	.	.	.	.	.	273.03
16.	13E1	.	.	.	.	.	.	.	.	.	272.91
17.	7E1	.	.	.	.	.	.	.	.	.	272.78
18.	10E1	.	.	.	.	.	.	.	.	.	271.71
19.	9E1	.	.	.	.	.	.	.	.	.	271.39
20.	26JH	.	.	.	.	.	.	.	.	.	269.78
21.	28JH	.	.	.	.	.	.	.	.	.	269.15
22.	25E1	.	.	.	.	.	.	.	.	.	268.29
23.	32C	.	.	.	.	.	.	.	.	.	266.23
24.	17E1	.	.	.	.	.	.	.	.	.	265.62
25.	31JH	.	.	.	.	.	.	.	.	.	265.41
26.	16E1	.	.	.	.	.	.	.	.	.	263.58
27.	27JH	.	.	.	.	.	.	.	.	.	263.10
28.	3E1	.	.	.	.	.	.	.	.	.	262.97
29.	36C	.	.	.	.	.	.	.	.	.	260.97
30.	20E1	.	.	.	.	.	.	.	.	.	258.24
31.	34C	.	.	.	.	.	.	.	.	.	258.15
32.	41SH	.	.	.	.	.	.	.	.	.	254.35
33.	35C	.	.	.	.	.	.	.	.	.	252.34
34.	38SH	.	.	.	.	.	.	.	.	.	248.18
35.	33C	.	.	.	.	.	.	.	.	.	248.00
36.	29JH	.	.	.	.	.	.	.	.	.	246.98
37.	39SH	.	.	.	.	.	.	.	.	.	245.87
38.	40SH	.	.	.	.	.	.	.	.	.	237.53
39.	30JH	.	.	.	.	.	.	.	.	.	234.37
40.	37SH	.	.	.	.	.	.	.	.	.	225.36

M = 265.19

σ = 14.6

COMBINED AI-OCI FACTOR SCORES
CULTURE III

School		Culture III Scores									
1.	21E1	.	.	.	.	.	.	.	.	.	116.57
2.	30JH	.	.	.	.	.	.	.	.	.	115.61
3.	38SH	.	.	.	.	.	.	.	.	.	113.21
4.	29JH	.	.	.	.	.	.	.	.	.	113.16
5.	37SH	.	.	.	.	.	.	.	.	.	113.02
6.	16E1	.	.	.	.	.	.	.	.	.	112.42
7.	40SH	.	.	.	.	.	.	.	.	.	112.26
8.	3E1	.	.	.	.	.	.	.	.	.	108.90
9.	27JH	.	.	.	.	.	.	.	.	.	106.78
10.	33C	.	.	.	.	.	.	.	.	.	106.50
11.	1E1	.	.	.	.	.	.	.	.	.	106.41
12.	17E1	.	.	.	.	.	.	.	.	.	104.30
13.	25E1	.	.	.	.	.	.	.	.	.	104.28
14.	34C	.	.	.	.	.	.	.	.	.	103.94
15.	31JH	.	.	.	.	.	.	.	.	.	103.74
16.	39SH	.	.	.	.	.	.	.	.	.	103.26
17.	19E1	.	.	.	.	.	.	.	.	.	102.71
18.	35C	.	.	.	.	.	.	.	.	.	102.60
19.	13E1	.	.	.	.	.	.	.	.	.	101.86
20.	41SH	.	.	.	.	.	.	.	.	.	101.57
21.	28JH	.	.	.	.	.	.	.	.	.	101.44
22.	26JH	.	.	.	.	.	.	.	.	.	99.71
23.	24E1	.	.	.	.	.	.	.	.	.	99.36
24.	12E1	.	.	.	.	.	.	.	.	.	98.85
25.	11E1	.	.	.	.	.	.	.	.	.	98.79
26.	32C	.	.	.	.	.	.	.	.	.	98.29
27.	4E1	.	.	.	.	.	.	.	.	.	98.27
28.	8E1	.	.	.	.	.	.	.	.	.	97.44
29.	9E1	.	.	.	.	.	.	.	.	.	97.39
30.	36C	.	.	.	.	.	.	.	.	.	97.38
31.	20E1	.	.	.	.	.	.	.	.	.	95.13
32.	14E1	.	.	.	.	.	.	.	.	.	94.23
33.	2E1	.	.	.	.	.	.	.	.	.	93.83
34.	18E1	.	.	.	.	.	.	.	.	.	93.21
35.	5E1	.	.	.	.	.	.	.	.	.	91.85
36.	6E1	.	.	.	.	.	.	.	.	.	90.16
37.	7E1	.	.	.	.	.	.	.	.	.	87.97
38.	22E1	.	.	.	.	.	.	.	.	.	87.01
39.	15E1	.	.	.	.	.	.	.	.	.	85.08
40.	10E1	.	.	.	.	.	.	.	.	.	82.22

M = 101.02

σ = 8.4

gaining insight into the influence of personality need and institutional press for each of the cultures under study.

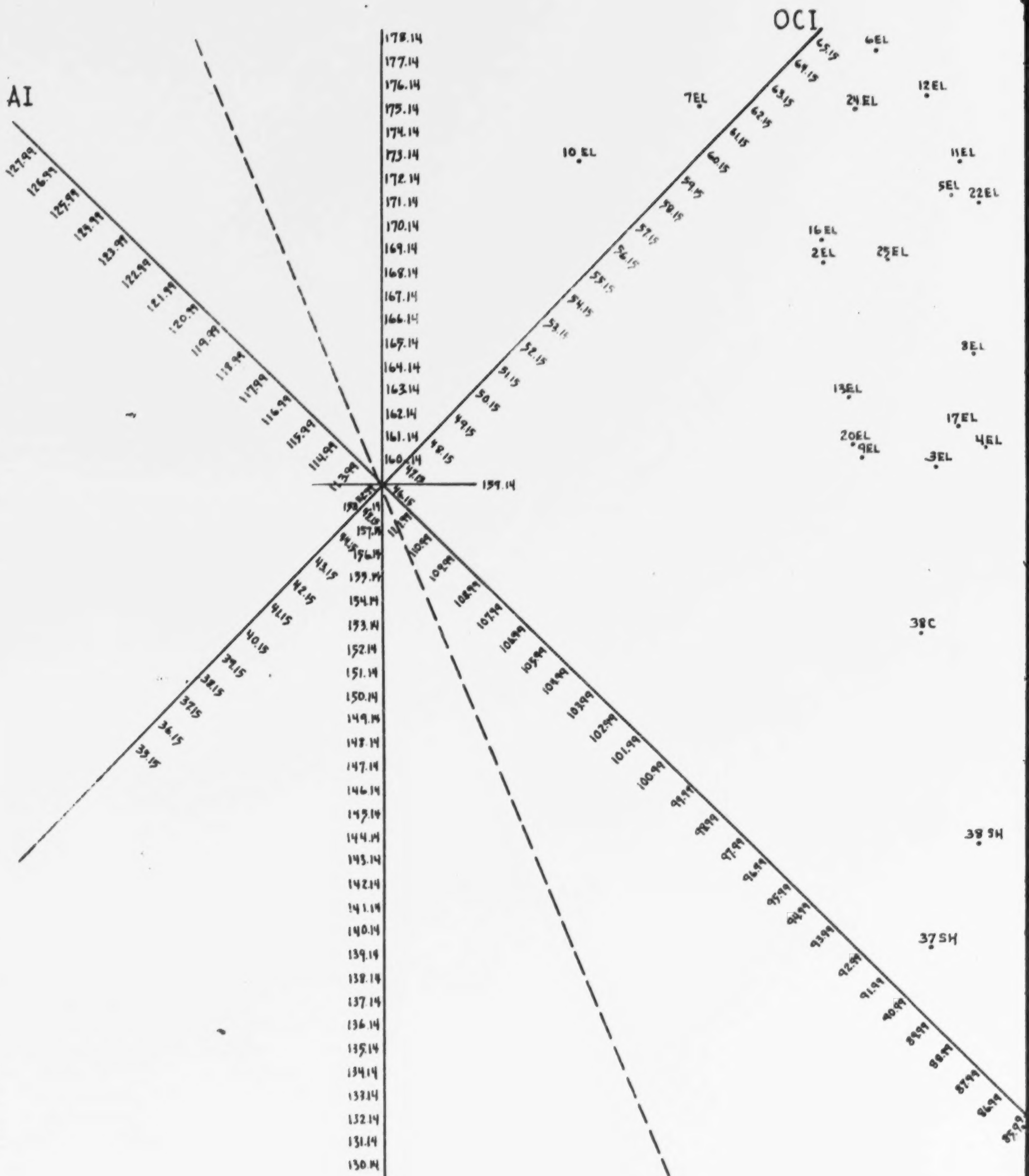
A method of analysis was developed which would take into account the theoretical and observed contributions of the AI and OCI components for each culture. A description of this process for each culture follows.

As illustrated in Figure 1, the vertical axis represented total scores with the mean of the distribution serving as the origin from which orthogonol lines were drawn. Scales representing AI and OCI contributions were drawn such that they were orthogonol to each other and inclined at 45° angles in opposite directions from the total score scale. The origin values of the AI and OCI scales were chosen such that they represented the correct theoretical contributions of each scale. In Culture I the AI contribution was 71 per cent while the OCI contribution was 29 per cent, i.e., raw scores of 112.99 AI and 46.15 OCI (Figure 1).¹

The dotted line represents where a school having any total Culture I score should fall if its total score

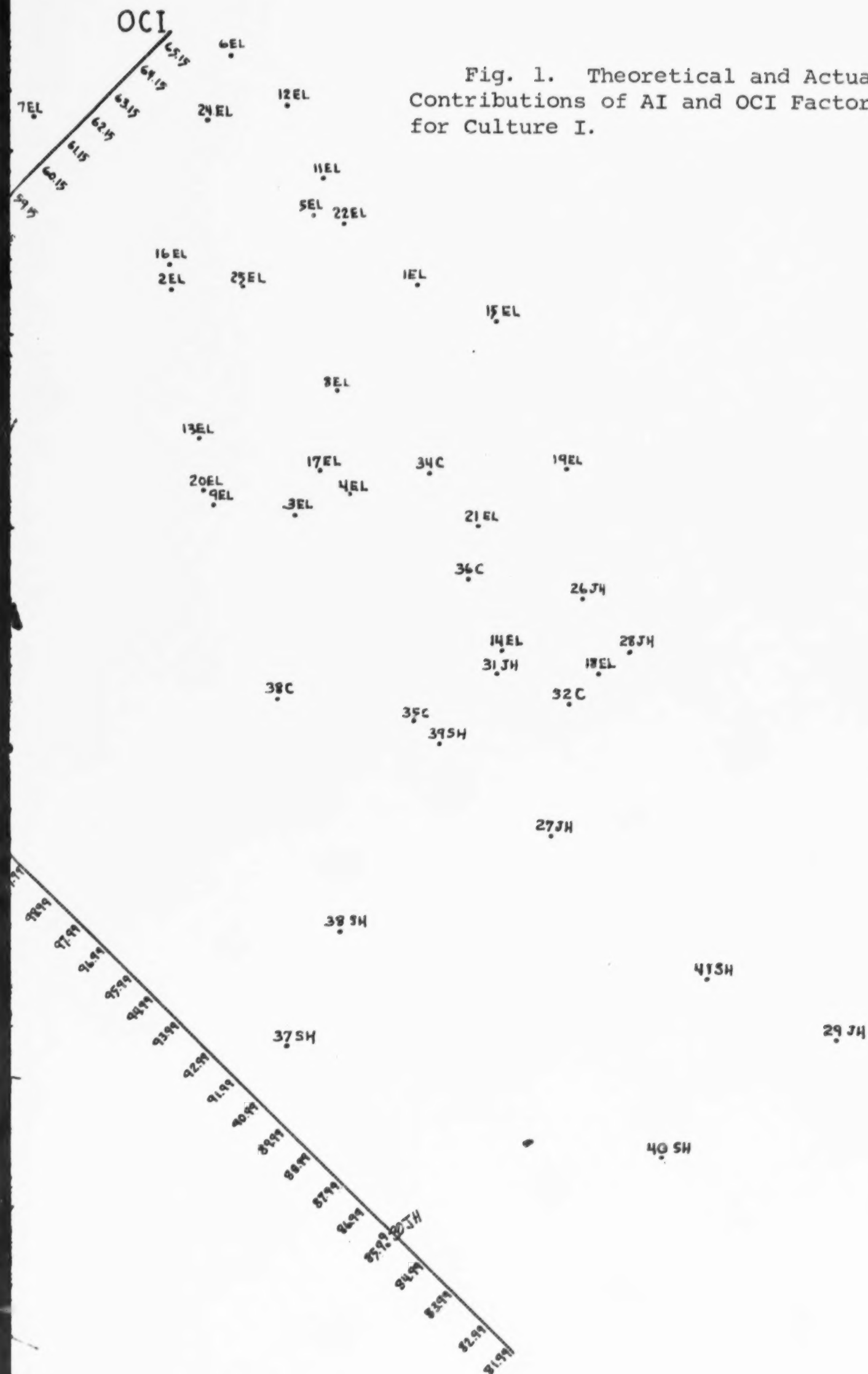
¹In order to determine these percentages, the total AI factor scores (200) and the total OCI factor scores (80) which composed Culture I were totalled equalling 280. This figure was divided into the contribution of the AI factors (200) and .71 was calculated. A similar operation was performed on the OCI factor (80) and .29 was the quotient.

SECTION 1



SECTION 2

Fig. 1. Theoretical and Actual Contributions of AI and OCI Factors for Culture I.



were composed of the theoretical percentages of AI and OCI factors. For example, a school having a total of 171.14 would have an AI score of 121.51 and an OCI score of 49.63 if the AI and OCI factors contributed 71 per cent and 29 per cent respectively.

The points from 1E1 to 41SH represent the actual contribution of AI and OCI scores for each school in Culture I. For example, school 22E1 has a total score of 171.17 but instead of falling on the theoretical line it is displaced to the extreme right. Instead of the AI and OCI scores being 121.53 and 49.64 respectively, they are actually 105.67 and 65.50. It appears that the OCI score is contributing more than is theoretically expected since all of the points are similarly displaced and it may be concluded that the institutional press influences the schools of this culture in a more pronounced way than the personality needs of the teachers.

A similar analysis was performed on Culture II (see Figure 2). In this culture, the correct theoretical contribution for the AI factors was 72 per cent and 28 per cent for the OCI factor. At the mean of the distribution,

SECTION 1

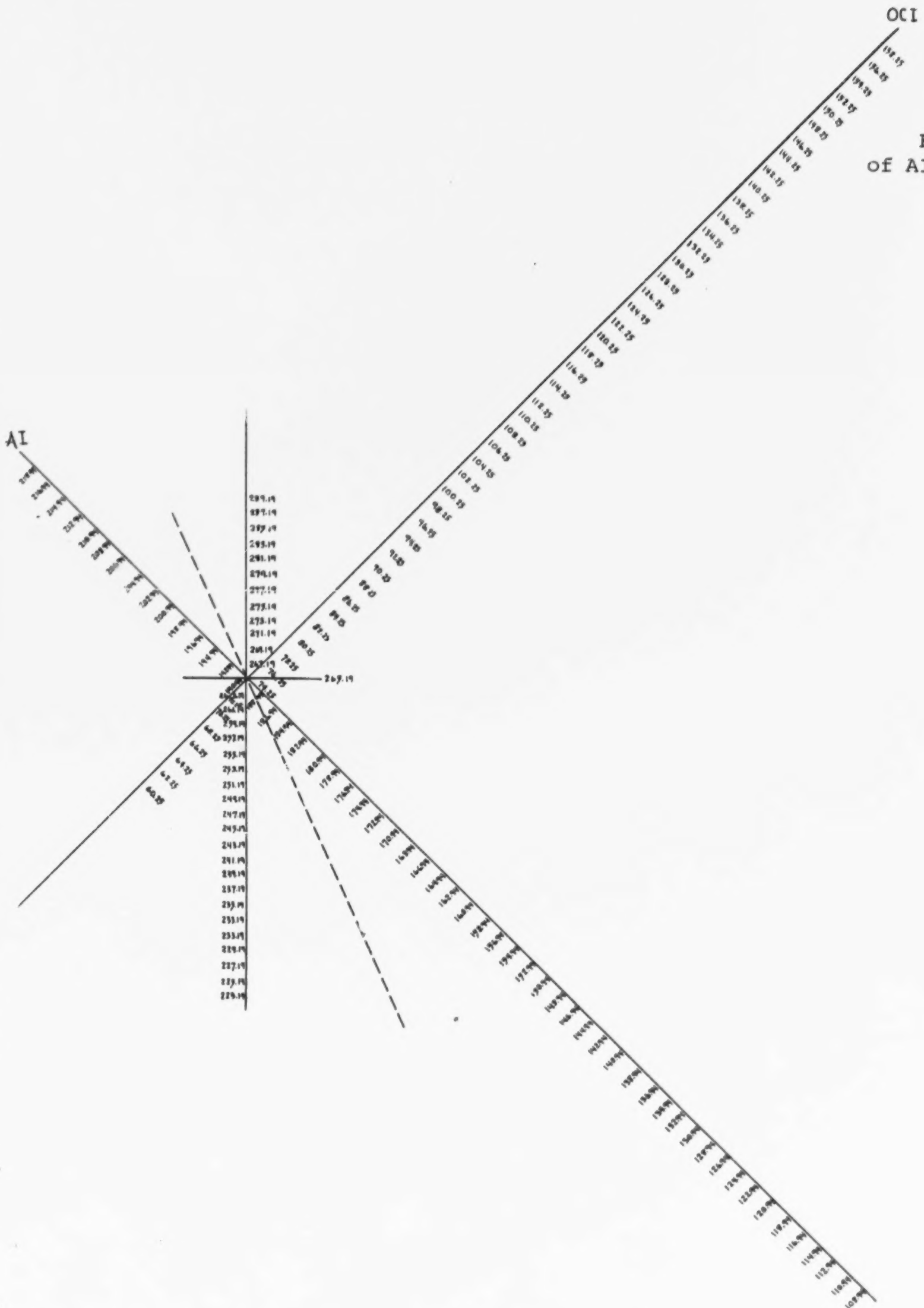


Fig. 2. The
of AI and OCI Fa

SECTION 2

Fig. 2. Theoretical and Actual Contributions of AI and OCI Factors for Culture II.



raw scores of 190.94 and 74.25 were computed for the AI and OCI factors respectively.¹

The dotted line in this culture represents where a school should fall if its total score were composed of the theoretical percentages of AI and OCI factors. For example, a school having a total of 275.19 would have an AI score of 198.14 and an OCI score of 77.05 if the AI and OCI factors contributed 72 per cent and 28 per cent respectively.

For each school in Culture II, points have been labeled from 1E1 to 41SH representing the actual AI and OCI contributions for every school. For example, school 1E1 has a total score of 275.28 and is extremely displaced with the rest of the distribution to the right. The actual score of the AI factors is 127.92 while the OCI factor contributes 147.36 to the total score. Again the influence of the institutional press is noted upon the total cultural scores. In this culture, the OCI factors seem to have a much more extreme influence upon the total score as exhibited by the placement of the distribution in Figure 2.

¹The total AI factor scores (180) and the total OCI factor score (70) which composed Culture II were totalled equalling 250. This figure was divided into the contribution of the AI factors (180) and .72 was found to be the contribution of these factors. The same procedure was followed using the OCI factor contribution (70) and .28 was computed as the theoretical contribution of the OCI factors.

For Culture III the theoretical contribution for both the AI and OCI factors was 50 per cent (Figure 3).¹ At the mean of the distribution, a raw score of 50.51 was computed for the needs and press components. If a school were composed of the theoretical percentages, then it would fall on the distribution line. For example, a school yielding a total score of 113.02 would have a score of 56.51 on both the AI and OCI factors if each of the factors contributed 50 per cent.

As in the other cultures, points are numbered from 1E1 to 41SH and computed using the actual AI and OCI contributions for each school. For example, school 37SH has a total score of 113.02 with the actual score of AI factors totalling 82.05 and the OCI factors contributing 30.97 to the total score.

Unlike Figures 1 and 2, distribution in Figure 3 is presented in an inverted position since it is negatively correlated in Culture I (-.63). It is important to note that the personality needs of the teachers influence the culture to a greater extent than the factors defining institutional press.

¹The total AI factor scores (210) and the total OCI factor score (210) which composed Culture III totalled equaling 420. The total was divided into the contribution of the AI factors (210) and .50 was found to be the contribution of these factors. A similar operation was performed on the OCI contribution (210) and .50 was calculated as the theoretical contribution of the OCI factors.

SECTION 1

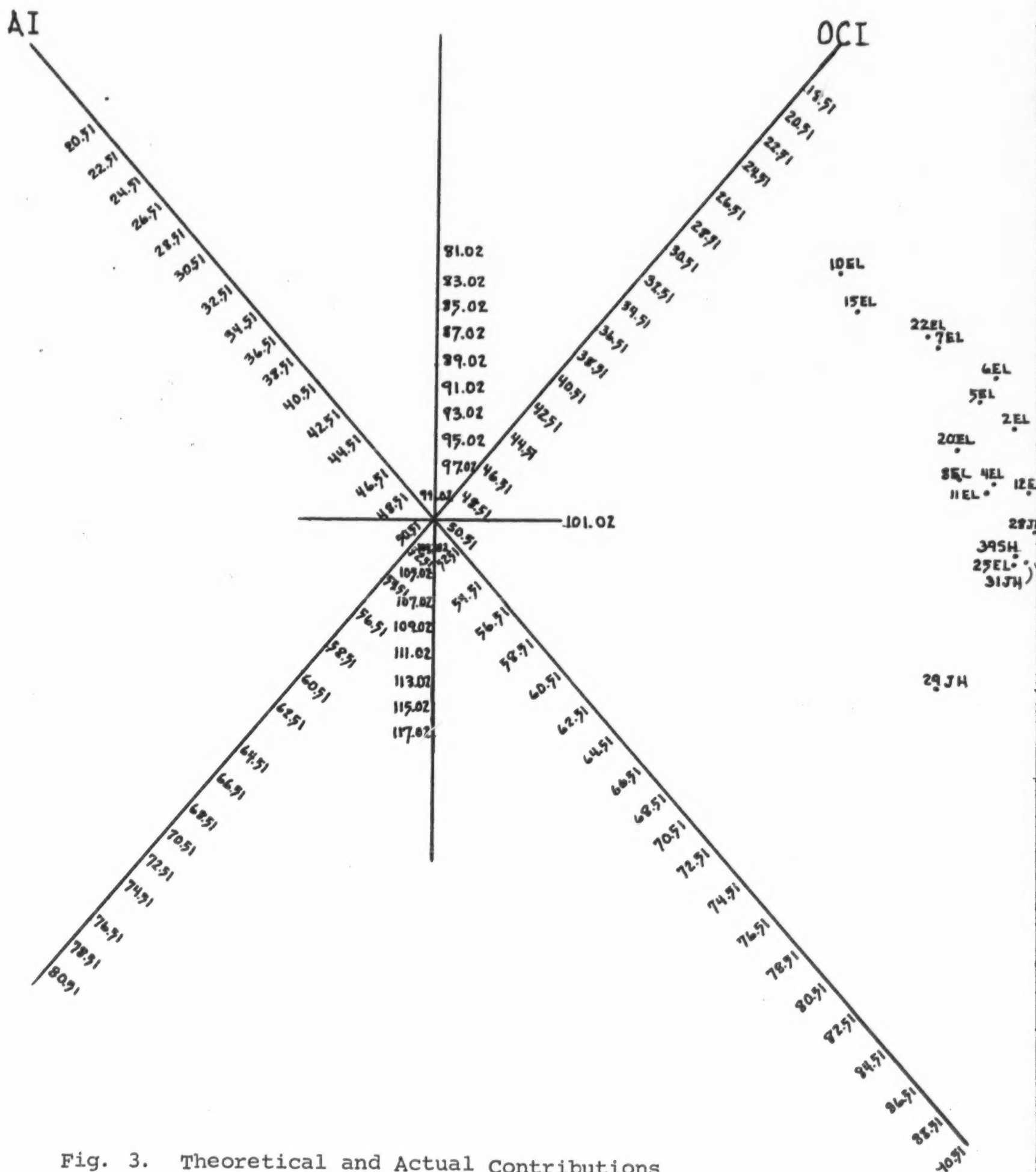
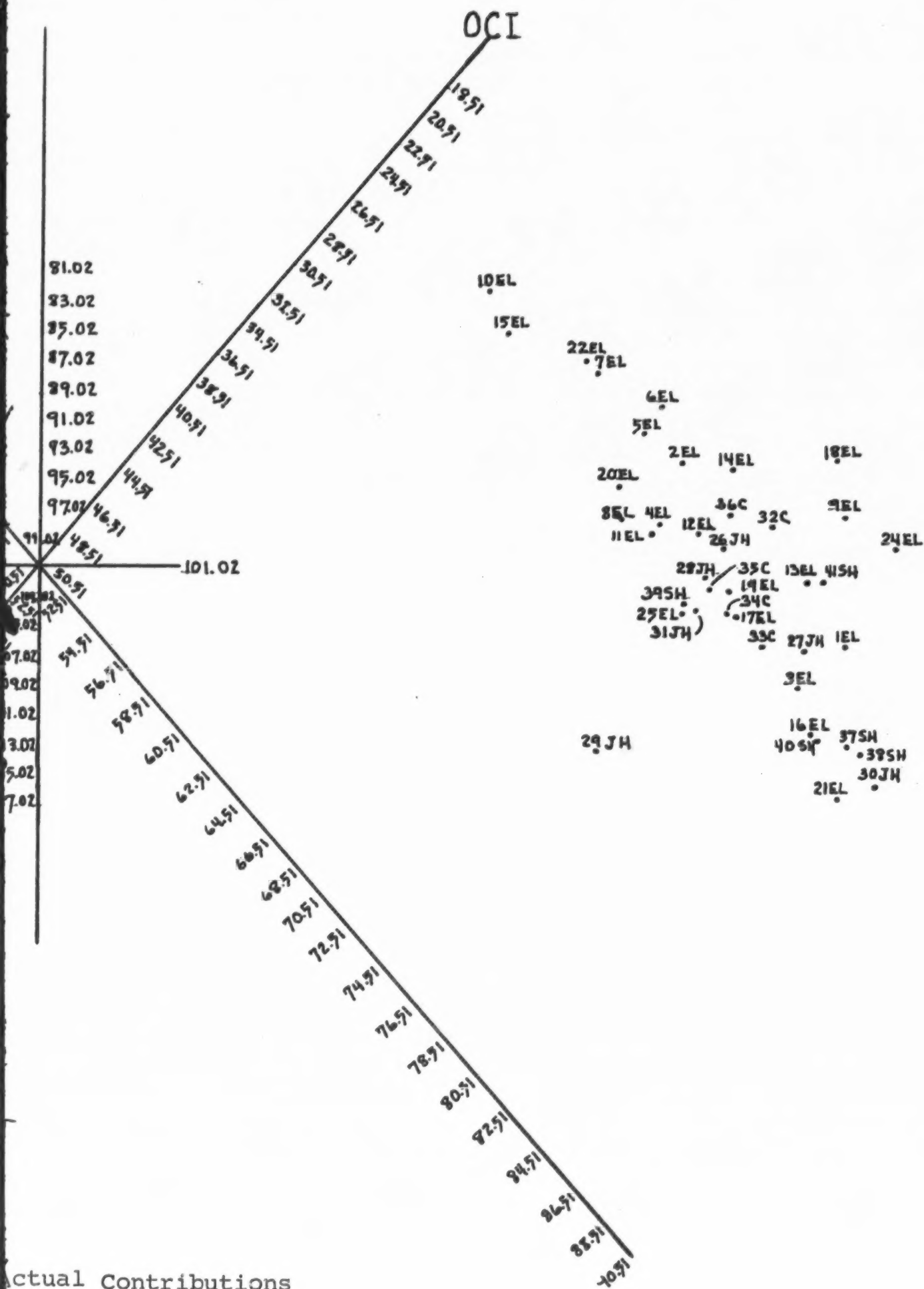


Fig. 3. Theoretical and Actual Contributions of AI and OCI Factors for Culture III.

SECTION 2



Actual Contributions
Figure III.

After examining the three cultures, it became apparent that high intercorrelations existed among them. For example, Cultures I and II were positively correlated (.83), while Cultures I and III were negatively correlated (-.63) as were Cultures II and III (-.67). This finding may account for many similarities found to be prevalent among the cultures and at the same time raises questions concerning the previous research done by Steinhoff with respect to the independence of the cultural types.

In summary, it appears that Culture I is influenced by the institutional press of the organization. Culture II is similarly influenced but in a much more extreme manner, while Culture III seems to reflect the personality needs of the teachers who comprise the school staff.

Defining Deviant and Homogeneous Schools

The distributions for each culture were plotted on a scatter diagram according to the raw scores achieved on the AI and OCI factors which defined the culture. Schools which seemed representative of the culture were defined as homogeneous, while schools which were pervasively

influenced by either of the two factors were designated as deviant schools.

It seemed worthwhile to study the differences between homogeneous and deviant schools for each culture, since it was anticipated that schools pervasively influenced by either personality needs or organizational press would differ from the homogeneous schools with respect to the variables under study. These differences would manifest themselves in behaviors which would either meet personality needs in AI deviant cultures or organizational goals in the OCI deviant cultures. For example, where personality needs were not being met in AI dominated schools incongruent behaviors such as high turnover and absenteeism may exist with an apparent lack of achieving organizational goals.

On the other hand, schools pervasively influenced by OCI factors might have a tendency to stress organizational goals such as attendance, low turnover, and achievement without regard for individual personality needs. In an attempt to delineate these schools the following procedures were employed.

In order to identify the deviant schools, regression lines were calculated for AI factors on OCI factors, and for OCI factors on AI factors. Since it was desirable to exclude schools which were deviant on AI factors or OCI factors, or both, an average regression line, that is a line that bisects the angle between the two previously mentioned regression lines, was plotted. Schools which deviate excessively from the average regression line were identified and parallel lines were drawn which excluded approximately one-third of the schools in each culture which were defined as deviant.

In Culture I, ten schools are defined as deviant with 14E1, 18E1, 19E1, 29JH, and 41SH excessively influenced by OCI factor and 7E1, 10E1, 20E1, 30JH, and 37SH similarly affected by the AI factor (Figure 4).

Twelve schools were deviant in Culture II (Figure 5). Of these, 18E1, 19E1, 20E1, 24E1, and 36C are affected by OCI factors, while the AI factors influenced schools 3E1, 4E1, 8E1, 10E1, 13E1, 21E1, and 25E1.

The third culture also exhibited similar divisions among schools (Figure 6). The OCI factors heavily

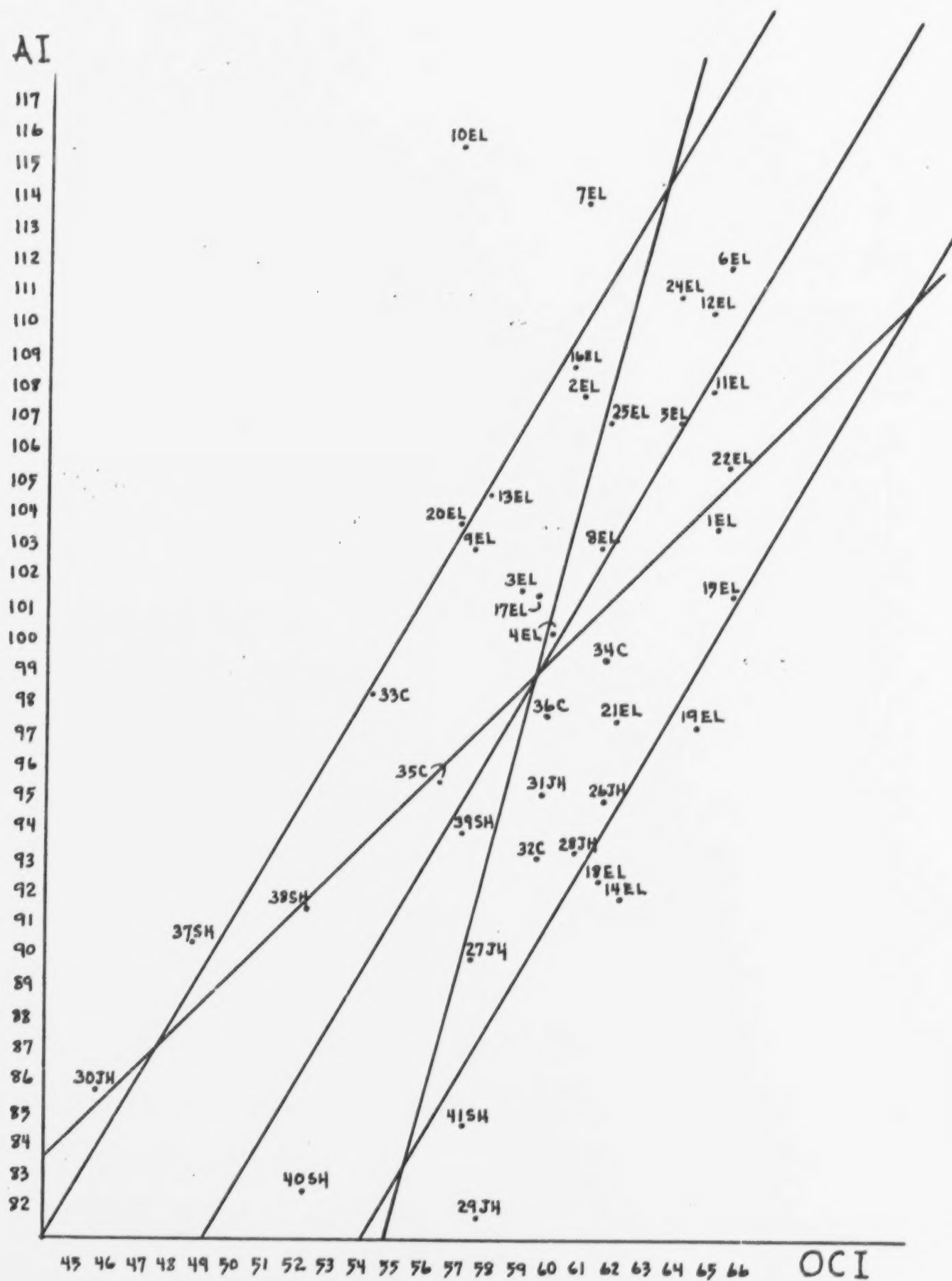


Fig. 4. Scatter Diagram and Regression Lines for the AI and OCI Factor Scores in Culture I.

Culture II.

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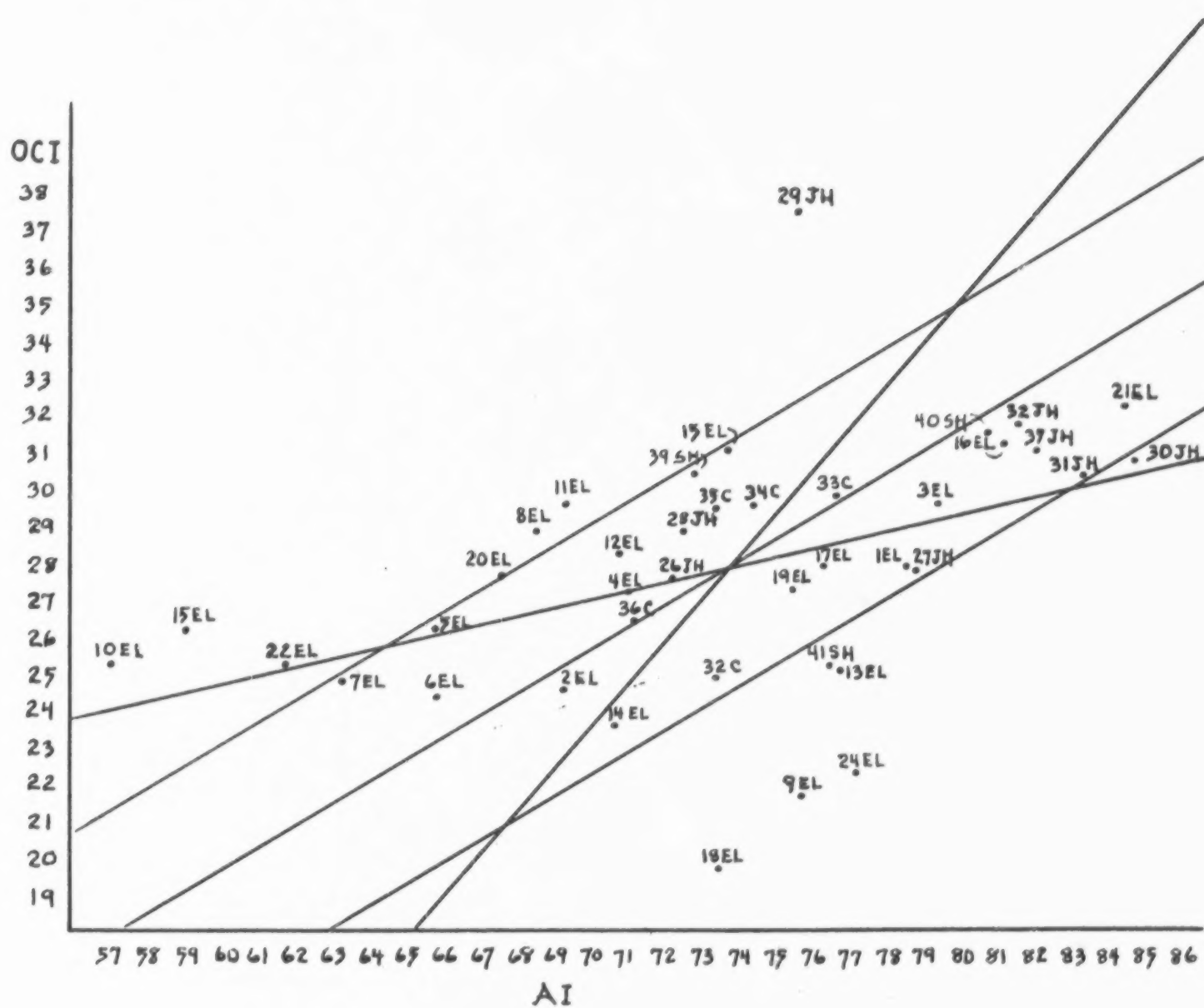


Fig. 6. Scatter Diagram and Regression Lines for the AI and OCI Factor Scores in Culture III.

influenced schools 8E1, 10E1, 11E1, 15E1, 20E1, 22E1, and 29JH, while six schools 9E1, 13E1, 18E1, 24E1, 30JH, and 41SH are affected by the AI factors.

In the analyses which follow to investigate the hypotheses under study, the homogeneous schools are subjected to a correlation coefficient analysis while the deviant schools were compared to homogeneous schools by the use of t-tests.

Relationships of Culture I and Selected
Pupil and Teacher Variables

H₁: In a culture characterized by convention, there will be high pupil achievement, low pupil absenteeism, low teacher absenteeism, and low teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

In Table 9, the intercorrelations of the pupil and teacher variables (Rows 1-5 and Columns 1-5) and the Conventional Culture scores (Row 6 and Column 6) of homogeneous schools are presented.

Obtained correlations for each of the dependent variables and the Culture I scores range from -.425 to

.082 (see Row 6). The relationship between the pupil and teacher variables and the conventional culture scores seem to be negative as two scales yield negative correlations. A slight positive correlation (.082) was observed on the teacher absenteeism scale but was not significantly different from zero. One correlation coefficient relating pupil absenteeism and Culture I scores (-.425) was found to be significant at less than the .025 level.

TABLE 9

CORRELATIONS AMONG PUPIL AND TEACHER
VARIABLES AND CULTURE I SCORES FOR
TWENTY-SEVEN HOMOGENEOUS SCHOOLS^a

	P Ach (1)	P Ab (2)	T Ab (3)	TT (4)	SEL (5)	CI (6)
P Ach (1)	-	-.547 ^f	-.261 ^b	-.327 ^c	.760 ^g	.035
P Ab (2)		-	.053	.144	-.525 ^e	-.425 ^d
T Ab (3)			-	.415 ^d	-.035	.082
T T (4)				-	-.232	-.194
S E L (5)					-	.064
C I (6)						-

^a Pearson product-moment coefficients rounded to the nearest thousandth with decimals omitted.

^b Significant at .10 level of confidence.

^c Significant at .05 level of confidence.

^d Significant at <.025 level of confidence.

^e Significant at <.005 level of confidence.

^f Significant at <.001 level of confidence.

^g Significant at <.0005 level of confidence.

Deviant schools are examined through utilization of three t-tests for determining mean differences on pupil and teacher variables between schools excessively influenced by the AI and OCI factors and homogeneous schools as well as between themselves.

The first t-test focused upon deviant schools influenced by AI factors and homogeneous schools in relation to the dependent variables (Table 10). A difference at the .06 level seems to indicate higher pupil absenteeism in deviant AI schools than in the homogeneous population.

TABLE 10

COMPARISONS OF MEANS OF DEVIANT CULTURE I
SCHOOLS INFLUENCED BY AI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Teacher Variables	Homogeneous Schools N = 27, 30	AI Deviant Schools N = 5	Difference Between Means	df	<u>t</u>
P Ach	66.22	59.40	6.82	30 ^b	1.043
P Ab	5.81	7.00	-1.19	33	-2.017 ^c
T Ab	3.07	2.78	.29	33	.784
T T	9.10	9.52	-.42	33	-.134
S E L	50.98	47.78	3.20	33	.842

^aTwo-tailed test.

^bAchievement scores unavailable for three schools.

^cSignificant differences between means at .06 level.

The second t-test was used to test differences between means between schools influenced by the OCI factor and homogeneous schools in Culture I in respect to the pupil and variables under study (Table 11). A difference at the .07 level was observed for teacher turnover and seemed indicative of higher teacher turnover in deviant OCI schools than in the homogeneous population.

TABLE 11

COMPARISONS OF MEANS OF DEVIANT CULTURE I
SCHOOLS INFLUENCED BY OCI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Teacher Variables	Homogeneous Schools N = 27, 30	OCI Deviant Schools N = 5	Difference Between Means	df	<u>t</u>
P Ach	66.22	70.20	-3.98	30 ^b	- .524
P Ab	5.81	6.64	- .83	33	-1.277
T Ab	3.07	2.76	.31	33	.838
T T	9.10	15.34	-6.24	33	-1.950 ^c
S E L	50.98	52.76	-1.78	33	- .446

^aTwo-tailed test.

^bAchievement scores unavailable for three schools.

^cSignificant difference between means at .07 level.

The final t-test compared the AI and OCI deviant schools in Culture I to another in relation to the variables under study (Table 12). No significant differences were observed.

TABLE 12

COMPARISONS OF MEANS OF DEVIANT CULTURE I SCHOOLS
INFLUENCED BY OCI FACTORS AND DEVIANT CULTURE I
SCHOOLS INFLUENCED BY AI FACTORS ON PUPIL
AND TEACHER VARIABLES^a

Pupil and Teacher Variables	AI Deviant Schools N = 5	OCI Deviant Schools N = 5	Difference Between Means	df	<u>t</u>
P Ach	59.40	70.20	-10.80	8	- .905
P Ab	7.00	6.64	.36	8	.267
T Ab	2.78	2.76	.02	8	.054
T T	9.52	15.34	- 5.82	8	- .869
S E L	47.78	52.76	- 4.98	8	-1.053

^aTwo-tailed test.

Relationships of Culture II and Selected
Pupil and Teacher Variables

H₂: In a culture characterized by work, there will be low pupil achievement, low pupil absenteeism, high teacher absenteeism, and high teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

In Table 13, the intercorrelation of the dependent variables (Rows 1-5 and Columns 1-5) and the Work Culture scores (Row 6 and Column 6) of homogeneous schools are presented.

TABLE 13

CORRELATIONS AMONG PUPIL AND TEACHER
VARIABLES AND CULTURE II SCORES FOR
TWENTY-FIVE HOMOGENEOUS SCHOOLS^a

	P Ach (1)	P Ab (2)	T Ab (3)	T T (4)	S E L (5)	C II (6)
P Ach (1)	-	-435 ^c	-269 ^b	-421 ^c	669 ^f	183
P Ab (2)		-	130	251	-529 ^d	-588 ^e
T Ab (3)			-	284 ^b	-174	182
T T (4)				-	-234	-291 ^b
S E L (5)					-	265
C II (6)						-

^a Pearson product-moment coefficients rounded to the nearest thousandth with decimals omitted.

^b Significant at .10 level of confidence.

^c Significant at <.025 level of confidence.

^d Significant at <.005 level of confidence.

^e Significant at <.001 level of confidence.

^f Significant at <.0005 level of confidence.

The correlation for each of the pupil and teacher behaviors and Culture II scores range from -.588 to 265 (see Row 6). The relationship between the dependent

variables and the Work Culture scores seem to be negative; with a negative correlation (-.291) being observed on the teacher turnover scale which was significant at the .10 level. The correlation-coefficient between pupil absenteeism and Culture II scores (-.588) was significant at less than .001 level.

The deviant schools were compared to the homogeneous schools and among themselves in relation to the dependent variables by the use of t-tests.

Schools which were influenced by the AI factors were compared to the homogeneous schools with the first t-test (Table 14). A difference, significant at the .01 level, was observed on the achievement scale indicating that in deviant schools affected by AI factors pupil achievement is higher than for homogeneous schools in Culture II.

The second t-test was used to test differences between means between deviant schools influenced by the OCI factor and homogeneous schools in Culture II in respect to the dependent variables (Table 15). A difference at the .07 level was observed on pupil achievement

and may indicate higher pupil achievement in schools pervasively influenced by institutional press when compared to homogeneous schools of the same culture.

TABLE 14
COMPARISONS OF MEANS OF DEVIANT CULTURE II
SCHOOLS INFLUENCED BY AI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Teacher Variables	Homogeneous Schools N = 25, 28	AI Deviant Schools N = 7	Difference Between Means	df	<u>t</u>
P Ach	63.38	82.83	-19.45	30 ^b	-2.811 ^d
P Ab	6.38	5.41	.97	33	1.617
T Ab	2.94	3.53	-.59	33	-1.844 ^c
T T	9.53	9.29	.24	33	.085
S E L	49.87	50.34	-.47	33	-.141

^aTwo-tailed test.

^bAchievement scores unavailable for three schools.

^cSignificant difference between means at .07 level.

^dSignificant difference between means at .01 level.

The third t-test compared differences between AI and OCI deviant schools in Culture II with respect to the dependent variables under study (Table 16). A difference at the .06 level was observed on teacher absenteeism and may indicate higher teacher absenteeism in deviant OCI

schools when compared to schools pervasively influenced by teacher personality needs.

TABLE 15
COMPARISONS OF MEANS OF DEVIANT CULTURE II
SCHOOLS INFLUENCED BY OCI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Teacher Variables	Homogeneous Schools N = 26, 28	OCI Deviant Schools N = 5	Difference Between Means	df	t
P Ach	63.38	76.60	-13.22	29 ^b	-1.899 ^c
P Ab	6.38	5.20	1.18	31	1.686
T Ab	2.94	2.80	.14	31	.378
T T	9.53	9.82	-.29	31	-.083
S E L	49.87	55.68	-5.81	31	-1.478

^aTwo-tailed test.

^bAchievement scores unavailable for two schools.

^cSignificant difference between means at .07 level.

Relationships of Culture III and Selected
Pupil and Teacher Variables

H₃: In a culture characterized by impulse expression, there will be low pupil achievement, high pupil absenteeism, low teacher absenteeism, and low teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

TABLE 16

COMPARISONS OF MEANS OF DEVIANT CULTURE II SCHOOLS
INFLUENCED BY OCI FACTORS AND DEVIANT CULTURE II
SCHOOLS INFLUENCED BY AI FACTORS ON PUPIL
AND TEACHER VARIABLES^a

Pupil and Teacher Variables	AI Deviant Schools N = 7	OCI Deviant Schools N = 5	Difference Between Means	df	<u>t</u>
P Ach	76.60	82.83	-6.23	9 ^b	- .730
P Ab	5.20	5.41	- .21	10	- .618
T Ab	2.80	3.53	- .73	10	-2.147 ^c
T T	9.82	9.29	.53	10	.113
S E L	55.68	50.34	5.34	10	1.467

^aTwo-tailed test.

^bAchievement scores unavailable for one school.

^cSignificant difference between means at .06 level.

In Table 17, the intercorrelations of the pupil and teacher variables (Rows 1-5 and Columns 1-5) and the Impulse Expression Culture Scores (Row 6 and Column 6) of homogeneous schools are presented.

Observed correlations for each of the dependent variables and the Culture III scores range from -.008 to .203 (see Row 6). The relationships between the pupil and teacher behaviors and the Impulse Expression Culture scores seem to be slightly positive as four scales yield

low positive correlations. No correlation coefficients relating to Culture III were significant.

TABLE 17
CORRELATIONS AMONG PUPIL AND TEACHER VARIABLES
AND CULTURE III SCORES FOR TWENTY-FOUR
HOMOGENEOUS SCHOOLS^a

	P Ach (1)	P Ab (2)	T Ab (3)	T T (4)	S E L (5)	C III (6)
P Ach (1)	-	-537 ^d	-354 ^b	-137	748 ^e	203
P Ab (2)		-	076	-076	-548 ^d	150
T Ab (3)			-	462 ^c	-087	-008
T T (4)				-	-027	074
S E L (5)					-	118
C III (6)						-

^aPearson product-moment coefficients rounded to the nearest thousandth with decimals omitted.

^bSignificant at .05 level of confidence.

^cSignificant at .01 level of confidence.

^dSignificant at <.005 level of confidence.

^eSignificant at <.0005 level of confidence.

The t-test was used to test differences between means between the deviant schools heavily influenced by AI or OCI factors and homogeneous schools and between themselves.

In the first comparison, deviant AI schools and homogeneous schools were compared in relation to the

dependent variables (Table 18). A difference at the .09 level on the pupil achievement level may indicate higher pupil achievement in deviant AI schools than in the homogeneous schools in this culture.

TABLE 18

COMPARISONS OF MEANS OF DEVIANT CULTURE III
SCHOOLS INFLUENCED BY AI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Homogeneous Teacher Schools Variables N = 24, 27	AI Deviant Schools N = 6	Differences Between Means	df	<u>t</u>
P Ach	62.80	75.25	-12.45	28 ^b -1.724 ^c
P Ab	5.88	6.50	- .62	31 - .596
T Ab	2.98	2.80	.18	31 .474
T T	9.69	9.75	- .06	31 - .020
S E L	49.53	50.09	- .56	31 - .149

^aTwo-tailed test.

^bAchievement scores unavailable for three schools.

^cSignificant difference between means at .09 level.

Deviant OCI schools were compared to the homogeneous schools of the culture in the second t-test in respect to the pupil and teacher variables under study (Table 19). A difference at the .07 level of confidence was observed on

socio-economic level of school neighborhoods and may suggest a higher socio-economic level in school neighborhoods in deviant OCI schools than for homogeneous schools of the culture.

TABLE 19

COMPARISONS OF MEANS OF DEVIANT CULTURE III
SCHOOLS INFLUENCED BY OCI FACTORS AND
HOMOGENEOUS SCHOOLS ON PUPIL AND
TEACHER VARIABLES^a

Pupil and Teacher Variables	Homogeneous Schools N = 26, 27	OCI Deviant Schools N = 7	Difference Between Means	df	<u>t</u>
P Ach	62.80	70.63	-7.83	31 ^b	-1.357
P Ab	5.88	5.78	.10	32	.145
T Ab	2.98	3.31	- .33	32	-1.100
T T	9.69	10.60	- .91	32	- .305
S E L	49.53	54.90	-5.37	32	-1.744 ^c

^aTwo-tailed test.

^bAchievement scores unavailable for one school.

^cSignificant difference between means at .07 level.

The third t-test compared deviant AI and OCI schools in Culture III to one another on the variables under investigation (Table 20). No significant differences were observed as a result of this analysis.

TABLE 20

COMPARISONS OF MEANS OF DEVIANT CULTURE III SCHOOLS
INFLUENCED BY OCI FACTORS AND DEVIANT CULTURE III
SCHOOLS INFLUENCED BY AI FACTORS ON PUPIL
AND TEACHER VARIABLES^a

Pupil and Teacher Variables	AI Deviant Schools	OCI Deviant Schools	Difference Between Means	df	<u>t</u>
P Ach	75.25	70.63	4.63	9 ^b	.402
P Ab	6.50	5.78	.72	11	.500
T Ab	2.80	3.31	-.51	11	-1.133
T T	9.75	10.60	-.85	11	.159
S E L	50.09	54.90	-4.81	11	-1.062

^aTwo-tailed test.

^bAchievement scores unavailable for two schools.

Relationships of Socio-Economic Level of
Neighborhoods and Selected Pupil and
Teacher Variables

Since the relationships between the pupil and teacher behaviors were negligible for many cases, the investigator examined the correlation matrices for each of the three cultures in an attempt to delineate any meaningful relationships which might shed light on the lack of significance exhibited between the pupil and teacher variables and the three cultural environments.

After analyzing the matrices, it was evident that many of the variables within the matrix were influenced by the socio-economic level of the school neighborhoods in a statistically significant manner (see Tables 9, 13, and 17).

As a result of this influence of socio-economic level of school neighborhoods on many of the variables under study, an intercorrelation matrix was designed using the pupil and teacher variables, for all the schools of the sample regardless of their cultural values or deviant composition, with the socio-economic level of school neighborhoods serving as the independent variable.

In Table 21, the intercorrelations of the pupil and teacher behaviors (Rows 1-4 and Columns 1-4) and the socio-economic level of school neighborhoods (Row 5 and Column 5) are presented.

Correlations for each of the dependent variables and the socio-economic level of school neighborhoods range from $-.561$ to $.713$ (see Row 5). Significant relationships exist in both positive and negative directions reflecting the influence of the independent variable on pupil

achievement, pupil absenteeism, and teacher turnover. Pupil achievement was found to be positively correlated (.713) and significant with probability $<.001$ and pupil absenteeism was negatively correlated (-.561) and also significant at the same confidence level. Teacher turnover was also negatively correlated (-.235) and was found to be significant at the .08 level while teacher absenteeism was also negatively correlated (-.097) but not to a significant degree.

TABLE 21
CORRELATIONS AMONG PUPIL AND TEACHER VARIABLES
AND SOCIO-ECONOMIC LEVEL OF FORTY
SCHOOL NEIGHBORHOODS^a

	P Ach (1)	P Ab (2)	T Ab (3)	T T (4)	S E L (5)
P Ach (1)	-	-492 ^f	-154	-380 ^e	713 ^f
P Ab (2)		-	063	294 ^d	-561 ^f
T Ab (3)			-	279 ^c	-097
T T (4)				-	-235 ^b
S E L (5)					-

^aPearson product-moment coefficients rounded to the nearest thousandth with decimals omitted.

^bSignificant at the .08 level of confidence.

^cSignificant at the .05 level of confidence.

^dSignificant at the .04 level of confidence.

^eSignificant at the .01 level of confidence.

^fSignificant at the $<.001$ level of confidence.

After discovering the pervasive influence of the socio-economic level of school neighborhoods on the variables under study, the investigator sought to determine the relationships of the behaviors and the cultural types when the socio-economic level was controlled. In order to accomplish this, the partial correlation technique was employed. The results of this analysis are presented in Table 22.

TABLE 22

PARTIAL CORRELATIONS OF CULTURE SCORE WITH
EACH VARIABLE REMOVING THE SOCIO-ECONOMIC
LEVEL OF SCHOOL NEIGHBORHOODS

	Culture I ^a	Culture I ^b	Culture II	Culture II	Culture III	Culture III
P Ach	035	-021	183	008	203	174
P Ab	-425	-461	-588	-547	150	258
T Ab	082	084	182	240	-008	002
T T	-194	-185	-291	-244	074	078

^aIn each culture the first column does not control the socio-economic level of school neighborhoods.

^bIn each culture the second column does control the socio-economic level of school neighborhoods.

In each case it seems apparent that the relationships controlling for socio-economic level vary only slightly from the relationship found between the pupil and teacher variables and the cultures without controlling for the socio-economic level of school neighborhoods. This finding seems to suggest the cultures do not influence the behaviors in a consistent fashion.

CHAPTER V

SUMMARY, CONCLUSIONS, OBSERVATIONS AND IMPLICATIONS

The purpose of this study was to investigate the influence of school cultures on selected pupil and teacher variables. Three school cultures were defined as Conventional, Work, and Impulse Expression. The selected variables were pupil achievement, pupil absenteeism, teacher absenteeism, teacher turnover, and the socio-economic level of school neighborhoods.

The study extended the findings of Steinhoff¹ who had described the psychological environment of a large urban school system using the needs-press constructs derived by Murray and refined by Stern.² In the present study the joint environmental press and personality needs factor was examined in relation to the selected pupil and teacher variables. The theory was that if the culture of a school has any theoretical importance, it must be related to the behavior of the personnel within the school, particularly those behaviors that the institution seeks to

¹Steinhoff, op.cit., p. 178.

²Stern, op. cit., 1964, p. 165.

foster or that are essential to, for the achievement of its purposes.

The sample included the teachers and pupils of forty schools in a large urban school system. The instruments employed in this study were used to define the three school cultures and pupil achievement. Data relating to pupil absenteeism, teacher absenteeism, teacher turnover, and socio-economic level of school neighborhoods was obtained from records maintained by the Board of Education of the school system under study.

During 1963-64 school year, Steinhoff identified the organizational climates and cultures of the sample schools from an analysis of the responses obtained from teachers of these schools to two instruments: the Activities Index and the Organizational Climate Index. The three cultures which were found were identified as Conventional, Work, and Impulse Expression Cultures. In the Conventional Culture, teachers who had low needs in self-assertion, audacity, intellectual interests, motivation, and applied interests were found in schools high in supportiveness.

In the Work Culture, teachers who had high needs in timidity, orderliness, submissiveness, and closeness, and low needs in self-assertion were found. The schools were characterized by a high degree of supportiveness and organization and a low degree of impulse expression.

The Impulse Expression Culture was characterized by schools which had a high degree of impulse expression and faculties which had high needs in self-assertion, closeness, sensuousness, expressiveness, and egoism. The present study used that analysis to assess the relationship between organizational culture and selected data taken from official records for the 1963-64 school year.

Pupil achievement for the same year was obtained by use of two instruments. In grades 6 and 9, the Iowa Tests of Basic Skills and in grade 11, the Iowa Test of Educational Development were administered in the schools during the fall of 1963.

Data relating to pupil absenteeism, teacher absenteeism, and teacher turnover were available from records supplied by the central office in the form of

attendance reports, payroll accounts, Board of Education minutes, and personnel files.

The socio-economic level of school neighborhoods was defined by use of the Socio-Economic Areas Index.¹ The socio-economic level of a school neighborhood was inferred by obtaining the summing mean scores for all the census tracts that the school served.

In analyzing the data, the distributions for each culture was plotted on a scatter diagram according to the raw scores achieved on the AI and OCI factors which defined the culture schools which seemed representative of the culture were defined as homogeneous, while schools which were pervasively influenced by either of the two factors were designated as deviant schools.

The homogeneous schools of each culture were analyzed by the intercorrelation techniques. t-tests were employed to compare the deviant schools to the homogeneous sample in order to establish if differences existed among schools pervasively influenced by personality needs or organizational press.

¹Willie and Wagenfeld, op. cit.

Since the relationships between pupil and teacher behaviors and culture were negligible for many cases, the investigator explored the possibility of a variable within the correlation matrix acting as an influencing factor on the selected variables under examination. The variable suggestive of this was the socio-economic level of school neighborhoods. As result, intercorrelation analysis was employed to evaluate this possibility. Similarly, a partial correlation analysis was performed for each culture by removing the effect of the socio-economic level of school neighborhoods. The findings of the analysis for each variable under study were then compared to the relationships obtained through the use of the intercorrelation technique without controlling for the socio-economic level of school neighborhoods.

Conclusions

Three hypotheses were tested in this study relating school culture and selected pupil and teacher behaviors.

H₁: In a culture characterized by convention, there will be high pupil achievement, low pupil absenteeism, low teacher absenteeism, and low teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

Only the hypotheses relating to pupil absenteeism and the socio-economic level of school neighborhoods were accepted in the conventional culture.

A high negative correlation was reported between pupil absenteeism and the cultural value of the school (-.425) and was found to be significant with probability .005. This finding seems to indicate that pupils attending these schools either accept the paternalistic atmosphere which prevails or that the adults in this culture will not accept absenteeism. The goal of attendance has been fostered by the teachers and administrators of schools within this culture who view attendance as one of the objectives of the institution. Attendance, therefore, becomes one of the norms by which a pupil is measured. That is, in order for a child to

gain acceptance from his teachers, he must not be absent. Therefore, it seems plausible to conclude that pupil attendance is related to the culture and is affected by the attitudes of the professional staff.

A slight positive relationship (.064) was observed on the socio-economic level of school neighborhood scale but was not significantly different from zero. This lack of relationship would suggest that the culture of the school is not affected by the socio-economic level of its clientele. Therefore, it seems that the personality of the teachers and institutional press of the organization are not related to the socio-economic level of the pupil.

H₂: In a culture characterized by work, there will be low pupil achievement, low pupil absenteeism, high teacher absenteeism, and high teacher turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

As in Culture I, only the hypotheses relating

to pupil absenteeism and the socio-economic level of school neighborhoods were accepted.

A high negative correlation was reported between pupil absenteeism and Culture II scores ($-.588$) and was found to be significant with probability $<.001$. This finding suggests that the structural work orientation of the culture is transmitted to the learner by the professional staff. Since one of the primary goals of the institution is attendance, this is mandated by the staff and absenteeism is rejected. A student must conform to the highly structured and regimented environment and attend on a regular basis or face sanctions as prescribed by the institution.

The lack of relationship between culture value and the socio-economic level of school neighborhoods ($.265$) suggests that the school culture is not affected by the socio-economic level of the area it serves.

H₃: In a culture characterized by impulse expression, there will be low pupil achievement, high pupil absenteeism, low teacher absenteeism, and low teacher

turnover while the socio-economic level of school neighborhoods will be unrelated to the culture.

Only the hypothesis relating to the socio-economic level of school neighborhoods and culture is accepted.

A slight positive relationship (.118) was observed but did not differ significantly from zero. This finding once again demonstrates that the socio-economic level of the clientele of the school does not affect the culture of the school.

Some Further Findings

Deviant and Homogeneous Schools AI Deviant Schools

When AI deviant schools were compared to the homogeneous schools in Culture I it was found that pupil absenteeism increased in the deviant schools. This finding suggests that when individual personality needs are operating in a dominant fashion that the goals of the institution may be neglected. Perhaps the pupil feels that attendance is not important on a regular

basis and therefore remains out of a school for various reasons. Since in such an environment the teachers and administrators may not be concerned about attendance as an institutional goal, the child may not be reinforced for his attendance efforts. The attitude of the child and the professional staff may be one of a lack of concern for this organizational goal.

In the work culture, greater teacher absenteeism and higher pupil achievement were prevalent in AI deviant schools when they were compared to homogeneous schools of this culture. A question may be raised as to how these apparently conflicting behaviors can occur with these results. One may suggest that the unique characteristics of the work culture make this phenomenon possible.

The rise in pupil achievement may be accounted for by suggesting that when a staff already oriented to achieving organizational goals becomes supportive of the child, that the learner may be stimulated to achieve on a higher level in an attempt to please the teacher as well as to satisfy the institutional expectation.

In contrast, higher teacher absenteeism may be suggestive of the teacher's rebellion against the work orientation culture. With a deviation toward meeting personality needs, the teacher may feel that absenteeism is justified as a means of relieving the pressure built up in the general culture milieu. One may speculate that the type of absenteeism manifested will be of a short term nature and will come over a long period of time in an attempt to avoid suspicion by the administration. It may also be suggested that this absenteeism will occur at times throughout the year which are not thought to be crucial to the student's progress so that minimal interference will occur in respect to meeting the institutional goals of achievement.

The Impulse Expression culture also exhibits an increase in pupil achievement. However, this achievement difference is only reported at the .09 level and as a result, may only be reported as a tendency. It would appear, however, that in an atmosphere characterized by the satisfaction of teacher personality needs that the staff would operate in a fashion which

would be suitable to enhancing those needs. It may, therefore, be suggested that teachers would be interested in raising the achievement level of their pupils since it would satisfy their own needs for achievement and success.

OCI Deviant Schools

In the OCI deviant cultures which are heavily influenced by institutional press, teacher turnover, pupil achievement, and socio-economic level of school neighborhoods seemed to increase when compared to the homogeneous schools of the three cultures.

In the Coventional Culture, OCI deviant schools exhibited greater teacher turnover when compared to homogeneous schools of the culture. This increase may be indicative of the teachers' resistance to institutional press. By leaving the environment, the individual is able to divorce himself from the situation and is able to satisfy his personality needs. His apparent concern for individual freedom forces him to reject organizational pressures which he feels may violate

his needs. As a result, he is likely to seek an environment in which he can function on a less constrained level and one in which he can concern himself with helping to develop organizational goals rather than simply reacting to them.

In the Work Culture, pupil achievement in OCI deviant schools increased when compared to the homogeneous schools of the culture. This finding seems to indicate that as organizational goals become more pronounced that achievement levels seem to increase. However, the issue is clouded because of a substantial difference in the socio-economic level of the school neighborhoods between OCI deviant schools and homogeneous schools of the culture. Since, socio-economic level of the pupils has a pervasive influence on their achievement, a question of cause and effect is still in doubt.

In the Impulse Expression Culture, the socio-economic level of school neighborhoods increases for the OCI dominant schools. This finding is significant at the .07 level and suggests that schools from these

higher socio-economic levels stress meeting organizational goals which include pupil achievement, low absenteeism, and low turnover. It is interesting to note that the same tendency exists in the other two deviant OCI cultures but not at a significant level. One may speculate that the structured and confining environment of OCI deviant cultures may be more advantageous to higher socio-economic classes since it perpetuates their values and objectives.

AI and OCI Deviant Schools

t-tests were also applied to the difference between means of AI and OCI deviant schools. The deviant schools represent the extreme ends of the continuum for each culture in terms of personality need and organizational press and interest centered around any differences which might exist over this wide range. Only in one case were differences found to exist at a significant level. This difference occurred in the Work Culture where teacher absenteeism was found to be greater in the OCI deviant schools and

was significant at the .06 level. This tendency seems to indicate that in a highly constrained environment that absenteeism may be a way of adapting to the highly regimented atmosphere. The escape mechanism may be necessary in order for a member of this type of culture to remain within the organization over a period of time.

Summary of Findings Relating to Culture

Scores and the Variables Under Study

The findings relating pupil and teacher behaviors to school culture seem to suggest that the effect of school culture on the behaviors is limited. Secondly, it appears that the differences between AI deviant schools, OCI deviant schools and homogeneous schools for each culture may be meaningful although a small sample was used. This would indicate that studies using larger samples may be worthwhile in an attempt to make a more complete study of this difference between schools influenced by personality needs or organizational press.

Socio-Economic Level

Since there were few significant relationships

between the cultural types and the pupil and teacher behaviors under study, a reexamination of the matrices was undertaken in an attempt to explain why this was the case. Primarily relationships within the matrices were analyzed in an effort to define commonalities and to suggest possible explanations for the lack of relationships with respect to culture and the pupil and teacher variables.

As each matrix was reviewed, the element of social class as defined by the socio-economic level of school neighborhoods seemed to relate in a meaningful fashion to many of the behaviors under study. These relationships were highly significant and seemed to suggest this variable was closely associated with the behaviors regardless of the school's cultural definition.

In order to assess the impact of social class on all of the schools of the sample, a correlation matrix was created with the socio-economic level of school neighborhoods serving as the independent variable.

The findings of this matrix revealed that the variables of pupil achievement, pupil absenteeism, and teacher turnover were all found to be significantly related to social class. These findings are supported by investigations carried on by such authorities as Sexton¹ and Reissman.²

Sexton found that when the Iowa Tests of Basic Skills were used to measure achievement that over half of the items dealt directly with verbal skills and were dependent upon the student's ability to read and his skill in taking written tests. It was further noted that the composite scores for tests rose as family income level increased and that the difference between groups widened with each subsequent year. It is suggested that in the present study with the same tests being administered at the elementary level that similar results tend to exist.

A strikingly similar pattern exists for pupil absenteeism. In the present study, as in that by Sexton, the greatest absenteeism is reported for the lower socio-economic classes.³ Their absenteeism may

¹Sexton, op. cit., p. 45.

²Reissman, op. cit., p. 17.

³Sexton, op. cit., p. 98.

be attributed to both physical and psychological health problems. Since in many cases housing conditions are substandard and medical care is poor, many children are susceptible to chronic illnesses and epidemic diseases. In some cases the child's illnesses are uncared for and he tends to miss school because of these conditions. However, this is only one facet of the absenteeism problem. Another facet which is perhaps even more meaningful is absenteeism for psychological and social reasons. This type of behavior may remain with the child as he grows older and could lead to eventual dropout from school. A study by Davidson and Lang seemed to describe this situation when they state that the unprivileged child accurately perceives the teacher's rejection of him and helps to lower the child's perception of himself and his attitude toward school.¹ Because of this perceived rejection, he will seek to escape from the environment and turns to absenteeism as one form of escape mechanism.

Teacher turnover was also related to social class in the present study. The relation was negative

¹ Davidson and Lang, op. cit., p. 107-18.

(-.235) and though of low order, it was significant at the .08 level and seems to suggest an overall pattern as reported by Reissman.¹ He states that schools which were located in lower social class neighborhoods had far greater teacher turnover than in all other areas of the city. Teachers seemed to prefer to teach "nice" children in "nice" schools in "nice" zones.² Principals from these slum schools continually reported that it was difficult to keep good teachers in the poorer areas of the city. Many teachers, especially women, were often afraid to teach in these schools and generally found the position less stimulating and less rewarding. These conclusions seem to prevail in the current study and are reflected in the statistics on teacher turnover.

Several relationships within the matrix also seem to reaffirm the effect of social class upon pupils and teachers. Four significant relationships were found and may be artifacts of the functional relationships of social class and the behaviors under study. That is, although these are relationships between

¹Reissman, op. cit., p. 17.

²Ibid.

variables their source seems to stem from socio-economic implications.

For example, a high negative correlation found between pupil achievement and absenteeism ($-.492$) was significant with probability $<.001$. It was noted that these behaviors were also highly correlated to social class and tend to suggest that both are products of social class structure. This generalization also seemingly holds true for relationships between pupil achievement and teacher turnover, pupil absenteeism and teacher turnover, and teacher absenteeism and teacher turnover. Each of these relationships seems to be part of a mosaic formed by social class and each capable of contributing a part to the final form of pupil and teacher behaviors.

After noting the pervasive influence of the socio-economic level of school neighborhoods on the behaviors under study, a partial correlational analysis was performed controlling the socio-economic level. In each case it was discovered that even with the socio-economic level of school neighborhoods controlled that

the culture does not influence many of the variables under study. This, once again, reaffirms the significance of socio-economic class as a determinant of behavior in our schools regardless of their cultural orientation.

Implications for Research

The current study has led the investigator to suggest the following possible research studies.

1. Replication of Steinhoff's study with various samples combined with interviews and observations to identify factors which relate to deviant as defined in this study.
2. In schools which have been integrated with children from different socio-economic levels, a comparison may be made with the current study in terms of the pupil and teacher behaviors under investigation.
3. Teachers who have been prepared in teacher preparation programs similar

to the Hunter College and Syracuse University Urban Teacher Programs may be compared to those who have had no specialized training in terms of their behaviors and attitudes toward the organizational climate.

4. Children and teachers in each of the schools of an urban school system could be given personality and organizational inventories in an effort to measure how these two groups perceive themselves and the institutional environment.
5. A study using a larger sample should be made in order to assess the differences between deviant and homogeneous schools.

APPENDIX A

AI-OCI FACTOR VALUES FOR SCHOOLS

TABLE 23
FACTOR VALUES FOR SCHOOLS^a

Factors		School							
		1	2	3	4	5	6	7	8
AI	(N=12)	(N=14)	(N=41)	(N=17)	(N=18)	(N=20)	(N=17)	(N=16)	
1. S/Asan	14.67	11.21	14.02	11.00	10.56	9.00	10.65	10.13	
2. Aud/Tim	11.17	10.64	12.20	10.94	10.44	9.20	10.24	10.94	
3. In/Int	24.17	23.14	23.98	25.47	23.50	22.10	20.18	25.56	
4. Motiv.	21.17	21.93	22.22	22.82	22.83	22.20	21.35	23.38	
5. Ap/Int	15.08	15.14	15.98	19.35	15.61	15.60	13.47	17.00	
6. Order.	23.08	23.86	21.83	26.35	23.89	24.20	21.59	23.38	
7. Submis.	24.67	24.07	24.02	24.00	23.39	23.25	23.59	24.38	
8. Close.	26.00	24.50	26.22	24.94	24.72	24.65	23.35	24.75	
9. Sens.	12.58	11.71	13.68	13.41	10.78	11.55	9.88	12.19	
10. Frnd.	12.08	11.29	11.05	10.94	10.44	9.80	11.35	13.56	
11. Exp/Con	17.25	14.50	17.20	13.53	12.44	13.50	12.29	13.69	
12. Ego/Dif	8.00	7.29	8.24	8.18	7.28	7.20	7.00	7.75	
OCI	(N=11)	(N=13)	(N=35)	(N=14)	(N=15)	(N=19)	(N=15)	(N=15)	
1. Supp	65.18	60.62	59.09	60.21	64.27	65.53	60.87	61.47	
2. Inp./Exp.	27.91	24.62	29.51	27.21	26.07	24.26	24.80	28.93	
3. Orgn	40.09	42.77	37.54	41.50	43.13	42.26	39.07	41.93	
4. Intell.	53.55	51.15	54.14	54.14	54.80	53.32	49.33	58.67	
5. Motiv.	52.09	50.92	52.51	48.00	50.60	50.95	48.80	51.20	
6. Pract.	21.91	19.85	20.54	19.86	22.07	23.11	20.47	22.67	

^aBy summing the factor values for each culture as defined in Table the total culture score for each school may be computed.

TABLE 23--Continued

Factors	School							
	9	10	11	12	13	14	15	16
AI	(N=12)	(N=10)	(N=19)	(N=12)	(N=13)	(N=11)	(N=13)	(N=10)
1. S/Asan	12.92	8.20	12.00	10.50	13.31	13.91	9.38	12.80
2. Aud/Tim	12.08	9.30	10.74	9.58	10.31	13.09	11.46	11.80
3. In/Int	24.92	19.90	22.05	22.00	23.38	27.18	24.38	20.10
4. Motiv.	23.00	22.60	21.05	20.50	23.31	25.09	25.08	21.20
5. Ap/Int	14.42	14.20	16.32	16.83	14.92	18.64	18.23	15.30
6. Order.	21.25	24.70	23.79	24.17	24.38	23.82	25.31	21.30
7. Submis.	24.17	22.20	23.32	22.83	24.69	25.36	26.23	21.70
8. Close.	25.75	21.20	25.00	25.50	26.77	24.82	23.38	26.40
9. Sens.	12.83	9.40	11.42	12.42	13.46	11.18	8.62	15.00
10. Frnd.	11.00	8.30	12.11	11.58	13.38	12.91	8.46	11.40
11. Exp/Con	17.08	11.70	13.89	13.42	14.62	13.36	10.69	16.20
12. Ego/Dif	7.25	6.50	6.95	8.92	8.62	7.36	6.92	10.80
OCI	(N=9)	(N=9)	(N=15)	(N=10)	(N=13)	(N=10)	(N=11)	(N=9)
1. Supp	57.56	57.00	65.00	65.30	57.92	62.30	65.82	60.44
2. Inp./Exp.	21.56	25.22	29.53	28.10	25.08	23.60	26.09	31.22
3. Orgn	39.22	39.33	44.20	45.30	37.85	39.00	41.73	39.56
4. Intell.	37.89	44.11	54.87	53.90	49.23	53.80	58.36	55.00
5. Motiv.	45.67	48.44	49.60	51.00	45.85	51.40	54.36	50.00
6. Pract.	18.11	19.78	23.07	22.20	19.46	20.80	22.36	20.11

TABLE 23--Continued

Factors	School								
	17	18	19	20	21	22	24	25	
AI	(N=28)	(N=20)	(N=15)	(N=12)	(N=7)	(N=12)	(N=14)	(N=25)	
1. S/Asan	13.43	13.40	14.13	13.00	13.86	8.42	9.57	12.60	
2. Aud/Tim	11.93	12.90	12.73	11.26	11.43	11.25	9.14	10.08	
3. In/Int	23.57	27.55	28.00	22.83	26.29	24.50	22.43	22.00	
4. Motiv.	25.00	24.85	23.60	24.58	24.29	24.50	21.14	22.64	
5. Ap/Int	14.36	18.75	18.40	14.67	16.57	15.92	16.64	15.64	
6. Order.	21.07	23.80	21.87	23.83	22.71	23.00	24.00	24.64	
7. Submis.	23.18	23.30	22.67	22.50	26.00	23.25	23.43	21.96	
8. Close.	25.54	24.70	24.40	23.17	26.86	23.00	25.57	25.16	
9. Sens.	13.00	12.30	13.60	10.08	13.43	10.75	12.21	12.56	
10. Frnd.	11.39	12.40	10.00	10.83	10.43	9.92	11.07	10.56	
11. Exp/Con	16.29	15.20	14.40	13.25	17.29	13.17	12.50	15.40	
12. Ego/Dif	8.11	7.90	8.87	8.08	11.00	6.50	7.36	7.56	
OCI	(N=27)	(N=17)	(N=14)	(N=11)	(N=8)	(N=12)	(N=13)	(N=21)	
1. Supp	59.56	61.41	64.64	57.09	62.00	65.50	64.08	61.76	
2. Inp./Exp.	27.93	19.71	27.21	27.55	32.13	25.17	32.15	31.00	
3. Orgn	39.56	44.94	46.00	33.45	42.88	42.00	43.23	38.43	
4. Intell.	50.59	55.24	63.79	43.09	57.50	51.08	47.54	55.48	
5. Motiv.	47.44	46.94	53.07	44.91	53.63	49.33	45.54	51.05	
6. Pract.	21.59	21.06	22.29	20.36	21.75	22.08	20.85	21.62	

TABLE 23--Continued

Factors	School								
	26	27	28	29	30	31	32	33	
AI	(N=34)	(N=35)	(N=27)	(N=13)	(N=37)	(N=27)	(N=21)	(N=20)	
1. S/Asan	16.24	17.20	13.85	17.23	19.16	14.41	14.10	16.35	
2. Aud/Tim	12.94	14.57	12.85	16.62	16.76	13.15	14.38	13.70	
3. In/Int	24.91	25.63	25.67	27.62	25.81	24.96	26.29	23.55	
4. Motiv.	24.65	25.20	26.22	27.31	24.51	25.48	25.00	23.25	
5. Ap/Int	17.26	17.46	18.04	19.38	17.84	18.00	17.10	14.75	
6. Order.	23.15	24.14	24.48	23.15	21.38	24.48	23.24	19.80	
7. Submis.	24.15	23.60	23.00	24.69	23.51	24.22	23.57	23.65	
8. Close.	24.50	25.74	24.00	24.46	23.97	24.89	24.24	23.30	
9. Sens.	11.71	12.57	12.37	11.08	13.46	12.00	12.33	11.80	
10. Frnd.	13.00	11.23	10.22	11.15	11.19	11.19	11.81	11.35	
11. Exp/Con	13.91	14.69	14.67	14.62	18.22	14.67	14.57	15.35	
12. Ego/Dif	6.82	8.69	7.63	8.23	9.97	7.44	8.19	9.90	
OCI	(N=30)	(N=36)	(N=27)	(N=13)	(N=30)	(N=27)	(N=21)	(N=20)	
1. Supp	61.70	57.56	60.89	57.92	45.83	59.67	59.52	54.25	
2. Inp./Exp.	27.53	27.89	28.93	37.54	30.83	30.33	24.86	29.80	
3. Orgn	42.00	41.72	42.41	38.15	36.43	40.04	39.00	37.05	
4. Intell.	55.73	52.39	58.67	62.69	40.77	60.04	49.86	47.90	
5. Motiv.	51.33	46.17	52.11	60.23	42.03	51.22	49.43	42.50	
6. Pract.	21.67	21.64	21.74	21.69	16.73	21.41	20.19	20.85	

TABLE 23--Continued

Factors	School						
	34	35	36	37	38	39	40
AI	(N=25)	(N=31)	(N=23)	(N=38)	(N=50)	(N=86)	(N=36)
1. S/Asan	13.88	15.26	14.26	18.92	17.84	16.56	19.17
2. Aud/Tim	13.04	13.13	13.09	15.87	14.16	14.35	15.94
3. In/Int	24.64	24.65	24.13	24.50	24.62	24.03	27.11
4. Motiv.	22.20	24.13	24.22	24.71	25.20	24.81	27.25
5. Ap/Int	16.08	17.23	16.43	15.50	16.72	16.29	17.89
6. Order.	21.68	23.32	20.09	19.97	22.84	22.29	22.81
7. Submis.	22.36	21.26	21.96	20.87	22.78	21.16	22.56
8. Close.	24.16	22.65	22.87	22.61	24.84	22.19	23.67
9. Sens.	12.68	12.06	11.30	12.82	12.78	10.95	12.39
10. Frnd.	10.72	10.68	12.43	10.97	12.58	10.64	11.81
11. Exp/Con	15.28	15.06	15.13	17.87	17.14	15.26	16.67
12. Ego/Dif	8.32	8.32	7.57	9.82	9.02	7.94	9.03
OCI	(N=23)	(N=28)	(N=20)	(N=40)	(N=46)	(N=78)	(N=30)
1. Supp	61.87	56.50	59.65	48.80	52.22	57.13	52.20
2. Inp./Exp.	29.52	29.25	26.25	30.98	31.59	30.36	31.33
3. Orgn	34.52	36.25	40.00	28.88	39.09	34.37	32.73
4. Intell.	52.00	51.32	51.90	43.83	52.41	55.14	50.17
5. Motiv.	50.09	45.86	48.25	41.13	48.07	48.88	45.40
6. Pract.	20.48	21.04	20.10	18.18	19.54	20.97	19.20

(N=37)

(N=36)

(N=86)

(N=50)

(N=38)

(N=23)

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APPENDIX B

ORGANIZATIONAL CLIMATE INDEX--FORM 1163

ORGANIZATIONAL CLIMATE INDEX

Form 1163

George G. Stern and Carl R. Steinhoff

There are 300 statements in this booklet. They are statements which describe the environment in which people work. The statements refer to daily activities, to rules and regulations and policies, to typical interests and projects, to features of the physical environment, etc. The statements may or may not be characteristic of your situation because organizations differ from one another in many ways. You are to decide which statements are characteristic of your institution and which are not. Your answers should tell us what you believe the institution is like rather than what you might personally prefer. You won't *know* the answer to many of these statements, because there may not be any really definite information on which to base your answer. *Your responses will simply mean that in your opinion the statement is probably true or probably false about your organization.*

Do not omit any item.

DIRECTIONS

On the special answer sheet print your name, and the other information requested. Then, as you read each statement in the booklet, *blacken* space

T — when you think the statement is generally TRUE or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

F — when you think the statement is generally FALSE or not characteristic of the organization, is something which is not likely to occur, is not the way people typically feel or act.

DIRECTIONS FOR USING NCS ANSWER SHEET

The rows of response circles are numbered to correspond to the items in the Test Booklet. Each question may be answered either ☐ or ☐.

In marking your answers on the Answer Sheet, make sure that the number of the Statement is the same as the number on the Answer Sheet. Be sure to answer either ☐ or ☐ for every Statement.

- Be sure to use a No. 2½ or softer writing pencil.
- Do Not Use Ball Point or Ink.
- Keep your Answer Sheet Clean.
- Do not make stray marks.
- Erase errors completely.
- Fill the circle completely.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

F — False. Generally false or not characteristic of the organization, is something which is not likely to occur, is not the way people typically feel or act.

1. Criticism of administrative policies and practices is encouraged.
2. The competition for recognition is intense.
3. Errors and failures are talked about freely so that others may learn from them.
4. It's hard to make friends here because there is so little opportunity to meet with other people.
5. People treat the furnishings and equipment with care here.
6. There are many differences in nationality, religion, and social status represented here.
7. Work programs are well organized and progress systematically from week to week.
8. Policy matters often provoke widespread discussions that are both intense and lively.
9. Important people here are always addressed as Mr., Mrs. or Sir.
10. People here are always trying to manipulate the activities of others for their own advantage.
11. Knowledge about national and international affairs is valued here.
12. People here express their feelings openly and enthusiastically.
13. Discussions get quite heated, with a lot of display of feeling.
14. Group activities are often released to the newspapers.
15. People here hope to achieve future fame and recognition.
16. Procedures to be followed in case of fires, air raids, and accidents are not prominently posted.
17. People here are interested in the analysis of social and political problems.
18. Policy changes occur slowly and only after considerable deliberation.
19. Formal receptions or formal social affairs are seldom held here.
20. Members of the top administration are expected to take a leading role in community affairs.
21. No one needs to be afraid of expressing extreme or unpopular viewpoints here.
22. Formal seating arrangements are quite common here for all sorts of group meetings.
23. People really look forward to vacations, leave or weekend breaks.
24. It's important here to be in the right club or group.
25. Discussions about ethics, morality, psychological problems or personal values are not unusual.
26. Applications of research, experimental analysis, surveys, and other forms of scientific method are encouraged.
27. Much has been done with pictures, draperies, colors, and decoration to make this place pleasing to the eye.
28. Most of the group are young and unmarried.
29. Everyone here has a strong sense of being a member of the team.
30. Books dealing with mathematics or logic are of interest to many of the people here.
31. It's necessary to be polite under all circumstances in order to stay out of trouble here.
32. It is fairly easy to keep up here without working too hard.
33. Most activities are closely supervised.
34. There is a lot of group spirit.
35. Most people here seem to be especially considerate of others.
36. Policies and methods of operation are frequently revised.
37. Administrative policy, goals, and objectives are carefully explained to everyone.
38. When people here disagree with an administrative decision, they work to get it changed.
39. People here make every effort to please the administrative staff.
40. Elections, peer-evaluations, or other forms of ratings of group members by one another generate strong feeling.
41. The expression of strong personal belief is pretty rare around here.
42. People can get into very heated arguments with one another, and be the best of friends the next day.
43. People here put a great deal of energy into everything they do.
44. People here are likely to dress colorfully.
45. People here like to speculate on unusual opportunities for quick advancement.
46. The daily schedule includes some rough physical activities.
47. Improving one's knowledge of important works of art, music, and drama is encouraged here.
48. People here often change the way they do things on the spur of the moment.
49. People take much pride in their personal appearance.
50. There is a lot of interest here in projects for collecting packages of food or clothing to help out others.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

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51. One of the values most stressed here is open-mindedness.
52. The administration expects that there will be no deviation from established practices no matter what the circumstances.
53. Social events get a lot of enthusiasm and support.
54. Achievements are weighed in terms of their practical value.
55. A lecture by an outstanding philosopher or theologian would be of interest to many of the people here.
56. People who are seriously interested in the natural sciences would be out of place here.
57. Music is never allowed when people are working.
58. People who have friends of the opposite sex show their affections openly.
59. People find others eager to help them get started.
60. People here spend a great deal of time thinking about and discussing complex problems.
61. People are seldom kept waiting when they have appointments with the administrative staff.
62. Getting ahead requires much intensive outside work in addition to doing your regular assignments.
63. Criticism or advice from an administrator is usually welcomed.
64. There are many opportunities for people to get together in planned social activities after hours.
65. People here tend to be cautious and self-controlled at all times.
66. The people here come from all parts of the country.
67. The ability to plan ahead is highly valued here.
68. People here are not likely to accept administrative ineptitude without complaint or protest.
69. The administrative staff rarely refer to one another by their first names.
70. The administration expects people to report violations of rules and regulations.
71. Daily newspapers are widely read.
72. The way people feel around here is always pretty evident.
73. Few people here would ever work to the point of exhaustion.
74. People here are provided with opportunities to develop skills and talents directing or coordinating the work of others.
75. Most people here would regard mountain-climbing or rugged camping trips as pretty pointless.
76. Posters, drills, or slogans stressing physical safety are not unusual here.
77. Few people here would be interested in attending a lecture by an outstanding literary critic.
78. Many social activities are unplanned and spontaneous.
79. People are expected to have a great deal of social grace and polish.
80. This place has a reputation for being indifferent to the public welfare.
81. Regulations are interpreted and enforced in an understanding manner.
82. Untidy reports or ones that depart from a specified style are almost certain to be returned unaccepted.
83. Most people here go to lots of parties and other social activities.
84. The emphasis here is on the abstract rather than the concrete and tangible.
85. There are many facilities and opportunities for individual creative activity.
86. Few people here would be interested in attending a lecture by an outstanding scientist.
87. Uniformity of decoration is the policy here, with no deviation from the norm.
88. Most people here love to dance.
89. People who are always offering their assistance are likely to be regarded as a nuisance.
90. Few people here are stimulated by intellectual activities or problems.
91. Almost anyone is likely to be blamed, even those who had little to do with it, if something happens to go wrong.
92. Personality and pull are more important than competence in getting ahead around here.
93. Most projects are done in groups rather than by individuals.
94. People have little to say to one another here.
95. The administrative staff are often joked about or criticized.
96. Everyone in this group has pretty much the same attitudes, opinions, and beliefs.
97. Most activities here are planned carefully.
98. People here speak up openly and freely.
99. Many people here try to pattern themselves after people who can help them.
100. Personal rivalries are fairly common in this place.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

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101. Most people here are not very interested in what goes on in politics or government.
102. People here are not only expected to have ideas but to do something about them.
103. There is so much to do here that people are busy all the time.
104. Most people here tend to be shy in groups.
105. Most people here are concerned with the present rather than the future.
106. Risk-taking in the physical sense is part of the day-to-day program.
107. Few people here are interested in literature, art, or music.
108. Quick decisions and action are not characteristic of this place.
109. Good manners and making a good impression are important here.
110. The activities of charities and social agencies are strongly supported.
111. Criticism is taken as a personal affront in this organization.
112. Neatness in this place is the rule rather than the exception.
113. People are always ready to drop their work and take a coffee break.
114. Many people here are efficient at making or repairing things.
115. Modern art and music get little attention here.
116. Few people in this group have any background in science.
117. There are no restaurants in this community offering unusual or exceptionally well-prepared food.
118. Male-female relationships sometimes become quite serious.
119. People are expected to work at their own problems in their own way.
120. Many people here enjoy talking about poetry, philosophy or religion.
121. People who work hard here do so in spite of the realization that someone else will be getting the credit.
122. People will have it in for you here if you work too hard.
123. The work of the individual is always evaluated in terms of group goals and objectives.
124. Everyone is helped to get acquainted.
125. A lot of people in this place walk around with a chip on their shoulder.
126. Familiar faces sometimes tend to disappear without much explanation.
127. All work assignments are laid out well in advance, so that people can plan their own schedules accordingly.
128. People here thrive on difficulty — the tougher things get, the harder everyone works.
129. People here are usually opposed to the local administrative staff.
130. The important people in this place expect others to show proper respect for them.
131. Any form of political activity is strongly discouraged by the administrative staff.
132. There are very few issues here which arouse much excitement or feeling.
133. Leadership here lacks vigor.
134. There are a good many colorful and controversial figures here.
135. Administrative policy supports the practical and the realistic.
136. People here are sometimes reminded to take preventive measures against illness.
137. People who usually talk about music, theater, or other art forms consistently are likely to be regarded as a little odd.
138. People here often start projects without trying to decide in advance how they will develop or where they may end.
139. Individuals who are not properly groomed are likely to have this called to their attention.
140. Service to the community is regarded as a major responsibility of the institution.
141. Sound reasoning is rewarded here, even though it may lead to unpopular conclusions.
142. Attendance is checked carefully.
143. No one takes their work too seriously here.
144. Family, social, or financial status are necessary elements for advancement or success here.
145. People here are not really concerned with deep philosophical or ethical matters.
146. A discussion about the latest scientific inventions would not be uncommon here.
147. People are encouraged to dress for personal comfort rather than for appearance.
148. The administration does not concern itself with the dating habits of people here.
149. People here have a great deal of freedom to do as they wish.
150. Thinking of alternative ways in which problems might be solved or things done differently is discouraged here.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

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151. No one is expected to suffer in silence if some regulation happens to create a personal hardship.
152. Good work is really recognized around here.
153. Work is checked to see if it is done properly and on time.
154. There are few opportunities for informal talk with administrators.
155. When people dislike policy they let the administrative staff know it in no uncertain terms.
156. Most members of the administrative staff have been here for many years.
157. Administrators are practical and efficient in the way they dispatch their business.
158. People avoid direct clashes with the administration at all costs.
159. Many people here will not hesitate to give strong public support to a project that the administrative staff is opposed to.
160. There are no favorites in this place; everyone gets treated alike.
161. Strong positions are taken here regarding civil liberties and minority groups.
162. Open displays of emotion have no place here.
163. People here can get so absorbed in their work they often lose all sense of time or personal comfort.
164. It's easy to find people here to talk before clubs and social groups.
165. There is little sympathy here for individuals who have ambitious daydreams about the future.
166. Conditions which involve some risk of physical danger are usually tolerated here.
167. People here are not concerned with the way our society is organized or how it operates.
168. People frequently do things on the spur of the moment.
169. Proper social forms and manners are not particularly important here.
170. There are excellent opportunities here for members of minority groups.
171. Many people here seem to brood, act moody, and are hard to figure out.
172. The buildings and grounds often look a little untidy.
173. Having a good time comes first here.
174. People with manual skills are highly respected here.
175. People here philosophize about different concepts of truth.
176. Magazines such as *Scientific American* are read by many people who work here.
177. Many people here have good personal collections of paintings and records.
178. Stories and novels about love are a popular form of reading material here.
179. The administrative staff is hardly ever concerned with the personal problems of the people who work here.
180. Few people here are challenged by deep thinking.
181. People are made to feel inadequate here for admitting that they don't know the answers.
182. People set high standards of achievement for themselves here.
183. People quickly learn what is done and not done here.
184. People here are reluctant to call one another by their first names.
185. When people dislike someone here, they make no secret of it.
186. New ideas are always being tried out here.
187. The flow of important information down from the administrative staff is smooth and efficient.
188. People here tend to take the easy way out when things get tough.
189. People delight in challenging official policies.
190. Anyone who knows the right people in the administration can get a better break.
191. The administrative staff encourages people to take an active interest in political activities.
192. People here tend to hide their deeper feelings from each other.
193. Administrators put a lot of energy and enthusiasm into directing this program.
194. Special events are given a great deal of fanfare and publicity.
195. People here talk about their future imaginatively and with enthusiasm.
196. Everyone here is "safety-first" conscious, anxious to avoid accidents and correct the conditions which produce them.
197. There are copies of famous paintings in the halls, rooms, or offices.
198. People who tend to say or do the first thing that occurs to them are likely to have a hard time here.
199. There is a general idea of appropriate dress which everyone follows.
200. The underdog enjoys sympathy and compassion here.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

F — False. Generally false or not characteristic of the organization, is something which is not likely to occur, is not the way people typically feel or act.

201. There always seem to be a lot of little quarrels going on here.
202. People sometimes exchange each other's responsibilities.
203. It's easy to get a group together for games, cokes, movies, etc.
204. The work atmosphere emphasizes efficiency and usefulness.
205. Administrators are quite often occupied with serious considerations of basic goals and values.
206. The latest scientific discoveries make few changes in the way this place is run.
207. Paintings or statues of nudes can be seen here.
208. The administrative staff does not consider sex a forbidden topic.
209. People often run errands or do other personal services for each other.
210. Administrators here are considered experts in their respective fields.
211. The administrative staff has little tolerance for complaints and protests.
212. Standards set by administrative staff are not particularly hard to achieve.
213. The public is interested in everything that is done here.
214. People spend a great deal of time together socially.
215. People are often noisy and inattentive when brought together in groups.
216. Most people dress and act pretty much alike.
217. There is no wasted time here; everything has been planned right to the minute.
218. People who get pushed around here are expected to fight back.
219. Administrators will see people by appointment only.
220. There would be little opposition to the formation of a committee to control conduct and ethics.
221. Discussions about improving society are common here.
222. People here can be wildly happy one minute and hopelessly depressed the next.
223. The day to day activities do not require a sustained or intensive effort.
224. Most people here are outgoing and extroverted.
225. Unusual or exciting plans are encouraged here.
226. Few people here smoke or drink.
227. Most people here are well-read.
228. People here feel free to express themselves impulsively.
229. People here are always looking for compliments.
230. People here expect to help out with fund drives, CARE, Red Cross, etc.
231. Administrative staff members are frequently jealous of their authority.
232. There is a specific place for everything and everyone here.
233. People here follow the maxim "business before pleasure."
234. Practical people are respected more than thinkers or dreamers here.
235. People here often get involved in long, serious intellectual discussions.
236. Many people here are engaged in research pertaining to their fields of specialization.
237. The use of vivid or novel expressions in conversation is generally frowned upon.
238. Some of the more popular people here have a knack for making witty, subtle remarks with a slightly sexy tinge.
239. The administrative staff will go out of its way to help you with your work.
240. People here seem to enjoy abstract problem-solving and detached thinking.
241. People here learn to accept criticism without talking back.
242. The successful performance of day to day duties is routine and undemanding.
243. The quality of your work cannot be kept a secret here.
244. People often prepare their work together.
245. Most people pay little attention to rules and regulations.
246. There are conventional ways of doing things here which are rarely changed.
247. People do not know how to prepare to be graded or rated because they do not know what is being looked for.
248. People here work well under stress.
249. Almost no one here ever makes fun of the people, traditions or policies of this place.
250. People here are always trying to win an argument.

Legend: T — True. Generally true or characteristic of the organization, is something which occurs or might occur, is the way people tend to feel or act.

F — False. Generally false or not characteristic of the organization, is something which is not likely to occur, is not the way people typically feel or act.

251. People here expect the world will be a better place to live because of their efforts.
252. Honors and special distinctions are generally awarded and received without any show of emotion.
253. The administrative staff expects that people will push themselves to the limit.
254. The administration here frowns on any form of public attention.
255. Not too many people want to become top leaders here.
256. People who are ill are encouraged to stay on the job and finish the day's work.
257. Many people here read magazines and books involving history, economics or political science.
258. Joking and laughing are usual in work situations here.
259. Looking and acting "right" is expected.
260. The people here are easily moved by the misfortunes or distress of others.
261. Everyone has the same opportunity to make good.
262. Communication within the organization is always carried on through formal channels.
263. People are always very serious and purposeful about their work.
264. The administration is satisfied to achieve short range goals and objectives.
265. People who are concerned with developing their own personal and private system of values would not fit in here.
266. The administration is research conscious.
267. Little attempt has been made to make this place comfortable or attractive.
268. There is a lot of steady dating here.
269. People here mind their own business.
270. People who attempt discussions on serious subjects are often made to feel foolish or out-of-place here.
271. There is a lot of apple-polishing around here.
272. Most activities here present a real personal challenge.
273. The quality of your work is rated or evaluated frequently.
274. Members of the administrative staff listen to people as well as direct them.
275. People ask permission before deviating from common policies or practices.
276. People here generally look for novelty and variety.
277. Most people here follow a regular plan for work and play.
278. It is always difficult to get a group decision here without a lot of discussion.
279. Administrators are sometimes given uncomplimentary nicknames.
280. There is a recognized group of leaders who receive special privileges.
281. Social issues are rarely discussed here.
282. People respond to pressure here in a calm and mild-mannered way.
283. People here feel they must really work hard because of the important nature of their work.
284. Parties are colorful and lively here.
285. A number of people here have had varied and unusual careers.
286. Few people bother with rubbers, hats, or other special protection against the weather.
287. Classical music is practically never heard here.
288. Programs here are quickly changed to meet new conditions.
289. People are always carefully dressed and neatly groomed.
290. "Lend a helping hand" could very well be the motto of this place.
291. Many people here are superstitious.
292. Formal rules and regulations have a very important place here.
293. People here believe that "all work and no play makes Jack a dull boy."
294. People here are generally efficient and successful in practical affairs.
295. There is considerable interest in the analysis of value systems and the relativity of societies and ethics.
296. There is a lot of interest in the philosophy and goals of science here.
297. Most people here attend concerts or art exhibits whenever they get the chance.
298. Frank discussions about sex are not uncommon among people here.
299. People here are usually quick to help each other out.
300. Careful reasoning and clear logic are highly valued here.

APPENDIX C
ACTIVITIES INDEX

STERN ACTIVITIES INDEX

George G. Stern, Syracuse University

This booklet contains a number of brief statements describing many different kinds of activities. You will like some of these things. They will seem more pleasant than unpleasant to you, perhaps even highly enjoyable. There will be others that you will dislike, finding them more unpleasant than pleasant. The activities listed in this booklet have been obtained from a great many different persons. People differ in the kinds of things they enjoy, like to do, or find pleasant to experience. You are to decide which of these you like and which you dislike.

DIRECTIONS

Print the information called for at the top of the special answer sheet: your name, the date, your age and sex, etc. Then, as you read each item, *blacken* space

- L — if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.
- D — if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

DIRECTIONS FOR USING NCS ANSWER SHEET

The rows of response circles are numbered to correspond to the items in the Test Booklet. Each question may be answered either ☐ or ☐.

In marking your answers on the Answer Sheet, make sure that the number of the Statement is the same as the number on the Answer Sheet. Be sure to answer either ☐ or ☐ for every Statement.

- * Be sure to use a #2½ or softer writing pencil.
- * Do Not Use Ball Point or Ink.
- * Keep your Answer Sheet Clean.
- * Do not make stray marks.
- * Erase errors completely.
- * Fill the circle completely.

Legend: L – if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D – if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

1. Taking the blame for something done by someone I like.
2. Setting difficult goals for myself.
3. Concealing a failure or humiliation from others.
4. Having other people let me alone.
5. Getting what is coming to me even if I have to fight for it.
6. Being quite changeable in my likes and dislikes.
7. Scheduling time for work and play during the day.
8. Working twice as hard at a problem when it looks as if I don't know the answer.
9. Seeing someone make fun of a person who deserves it.
10. Persuading a group to do something my way.
11. Being a newspaperman who crusades to improve the community.
12. Listening to music that makes me feel very sad.
13. Taking up a very active outdoor sport.
14. Keeping in the background when I'm with a group of wild, fun-loving, noisy people.
15. Toughening myself, going without an overcoat, seeing how long I can go without food or sleep, etc.
16. Diving off the tower or high board at a pool.
17. Learning about the causes of some of our social and political problems.
18. Doing something crazy occasionally, just for the fun of it.
19. Imagining what I would do if I could live my life over again.
20. Feeding a stray dog or cat.
21. Taking special precautions on Friday, the 13th.
22. Washing and polishing things like a car, silverware, or furniture.
23. Making my work go faster by thinking of the fun I can have after it's done.
24. Being good at typewriting, knitting, carpentry, or other practical skills.
25. Understanding myself better.
26. Learning how to prepare slides of plant and animal tissue, and making my own studies with a microscope.
27. Holding something very soft and warm against my skin.
28. Talking about how it feels to be in love.
29. Belonging to a close family group that expects me to bring my problems to them.
30. Concentrating intently on a problem.
31. Suffering for a good cause or for someone I love.
32. Working for someone who will accept nothing less than the best that's in me.
33. Defending myself against criticism or blame.
34. Going to the park or beach with a crowd.
35. Shocking narrow minded people by saying and doing things of which they disapprove.
36. Getting up and going to bed at the same time each day.
37. Planning a reading program for myself.
38. Returning to a task which I have previously failed.
39. Doing what most people tell me to do, to the best of my ability.
40. Having other people depend on me for ideas or opinions.
41. Being an important political figure in a time of crisis.
42. Crying at a funeral, wedding, graduation, or similar ceremony.
43. Exerting myself to the utmost for something unusually important or enjoyable.
44. Wearing clothes that will attract a lot of attention.
45. Working until I'm exhausted, to see how much I can take.
46. Being careful to wear a raincoat and rubbers when it rains.
47. Studying the music of particular composers, such as Bach, Beethoven, etc.
48. Acting impulsively just to blow off steam.
49. Thinking about ways of changing my name to make it sound striking or different.
50. Discussing with younger people what they like to do and how they feel about things.

Legend: L – if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D – if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

51. Waiting for a falling star, white horse, or some other sign of success before I make an important decision.
52. Keeping my bureau drawers, desks, etc., in perfect order.
53. Spending most of my extra money on pleasure.
54. Learning how to repair such things as the radio, sewing machine, or car.
55. Thinking about different kinds of unusual behavior, like insanity, drug addition, crime, etc.
56. Studying wind conditions and changes in atmospheric pressure in order to better understand and predict the weather.
57. Eating after going to bed.
58. Watching a couple who are crazy about each other.
59. Working for someone who always tells me exactly what to do and how to do it.
60. Finding the meaning of unusual or rarely used words.
61. Being polite or humble no matter what happens.
62. Setting higher standards for myself than anyone else would, and working hard to achieve them.
63. Admitting when I'm in the wrong.
64. Leading an active social life.
65. Doing something that might provoke criticism.
66. Rearranging the furniture in the place where I live.
67. Putting off something I don't feel like doing, even though I know it has to be done.
68. Having to struggle hard for something I want.
69. Listening to a successful person tell about his experience.
70. Getting my friends to do what I want to do.
71. Taking an active part in social and political reform.
72. Avoiding excitement or emotional tension.
73. Staying up all night when I'm doing something that interests me.
74. Speaking at a club or group meeting.
75. Imagining myself president of the United States.
76. Crossing streets only at the corner and with the light.
77. Listening to TV or radio programs about political and social problems.
78. Being in a situation that requires quick decisions and action.
79. Pausing to look at myself in a mirror each time I pass one.
80. Helping to collect money for poor people.
81. Paying no attention to omens, signs, and other forms of superstition.
82. Keeping an accurate record of the money I spend.
83. Dropping out of a crowd that spends most of its time playing around or having parties.
84. Helping to direct a fund drive for the Red Cross, Community Chest, or other organizations.
85. Imagining life on other planets.
86. Reading articles which tell about new scientific developments, discoveries, or inventions.
87. Chewing on pencils, rubber bands, or paper clips.
88. Talking about who is in love with whom.
89. Being a lone wolf, free of family and friends.
90. Spending my time thinking about and discussing complex problems.
91. Trying to figure out how I was to blame after getting into an argument with someone.
92. Competing with others for a prize or goal.
93. Being ready with an excuse or explanation when criticized.
94. Meeting a lot of people.
95. Arguing with an instructor or superior.
96. Being generally consistent and unchanging in my behavior.
97. Going to a party where all the activities are planned.
98. Doing a job under pressure.
99. Going along with a decision made by a supervisor or leader rather than starting an argument.
100. Organizing groups to vote in a certain way in elections.

Legend: L — if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D — if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

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| 101. Living a life which is adventurous and dramatic. | 126. Moving to a new neighborhood or city, living in a different country, etc. |
| 102. Having someone for a friend who is very emotional. | 127. Finishing something I've begun, even if it is no longer enjoyable. |
| 103. Sleeping long hours every night in order to have lots of rest. | 128. Staying away from activities which I don't do well. |
| 104. Playing music, dancing, or acting in a play before a large group. | 129. Following directions. |
| 105. Thinking about what I could do that would make me famous. | 130. Being able to hypnotize people. |
| 106. Riding a fast and steep roller coaster. | 131. Playing an active part in community affairs. |
| 107. Comparing the problems and conditions of today with those of various times in the past. | 132. Going on an emotional binge. |
| 108. Doing whatever I'm in the mood to do. | 133. Walking instead of riding whenever I can. |
| 109. Daydreaming about what I would do if I could live my life any way I wanted. | 134. Doing something that will create a stir. |
| 110. Comforting someone who is feeling low. | 135. Thinking about winning recognition and acclaim as a brilliant military figure. |
| 111. Avoiding things that might bring bad luck. | 136. Standing on the roof of a tall building. |
| 112. Arranging my clothes neatly before going to bed. | 137. Studying different types of government, such as the American, English, Russian, German, etc. |
| 113. Getting as much fun as I can out of life, even if it means sometimes neglecting more serious things. | 138. Doing things on the spur of the moment. |
| 114. Learning how to make such things as furniture or clothing myself. | 139. Having lots of time to take care of my hair, hands, face, clothing, etc. |
| 115. Trying to figure out why the people I know behave the way they do. | 140. Having people come to me with their problems. |
| 116. Doing experiments in physics, chemistry or biology in order to test a theory. | 141. Being especially careful the rest of the day if a black cat should cross my path. |
| 117. Sleeping in a very soft bed. | 142. Recopying notes or memoranda to make them neat. |
| 118. Seeing love stories in the movies. | 143. Finishing some work even though it means missing a party or dance. |
| 119. Having someone in the family help me out when I'm in trouble. | 144. Working with mechanical appliances, household equipment, tools, electrical apparatus, etc. |
| 120. Working crossword puzzles, figuring out moves in checkers or chess, playing anagrams or scrabble, etc. | 145. Thinking about what the end of the world might be like. |
| 121. Admitting defeat. | 146. Studying the stars and planets and learning to identify them. |
| 122. Taking examinations. | 147. Listening to the rain fall on the roof, or the wind blow through the trees. |
| 123. Being corrected when I'm doing something the wrong way. | 148. Flirting. |
| 124. Belonging to a social club. | 149. Knowing an older person who likes to give me guidance and direction. |
| 125. Teasing someone who is too conceited. | 150. Being a philosopher, scientist, or professor. |

Legend: L – if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D – if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

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| 151. Having people laugh at my mistakes. | 176. Going to scientific exhibits. |
| 152. Working on tasks so difficult I can hardly do them. | 177. Chewing or popping gum. |
| 153. Keeping my failures and mistakes to myself. | 178. Reading novels and magazine stories about love. |
| 154. Going to parties where I'm expected to mix with the whole crowd. | 179. Having others offer their opinions when I have to make a decision. |
| 155. Annoying people I don't like, just to see what they will do. | 180. Losing myself in hard thought. |
| 156. Leading a well-ordered life with regular hours and an established routine. | 181. Accepting criticism without talking back. |
| 157. Planning ahead so that I know every step of a project before I get to it. | 182. Doing something very difficult in order to prove I can do it. |
| 158. Avoiding something at which I have once failed. | 183. Pointing out someone else's mistakes when they point out mine. |
| 159. Turning over the leadership of a group to someone who is better for the job than I. | 184. Having lots of friends who come to stay with us for several days during the year. |
| 160. Being an official or a leader. | 185. Playing practical jokes. |
| 161. Actively supporting a movement to correct a social evil. | 186. Doing things a different way every time I do them. |
| 162. Letting loose and having a good cry sometimes. | 187. Keeping to a regular schedule, even if this sometimes means working when I don't really feel like it. |
| 163. Taking frequent rest periods when working on any project. | 188. Quitting a project that seems too difficult for me. |
| 164. Being the only couple on the dance floor when everyone is watching. | 189. Listening to older persons tell about how they did things when they were young. |
| 165. Imagining situations in which I am a great hero. | 190. Organizing a protest meeting. |
| 166. Driving fast. | 191. Getting my friends to change their social, political, or religious beliefs. |
| 167. Talking about music, theater or other art forms with people who are interested in them. | 192. Yelling with excitement at a ball game, horse race, or other public event. |
| 168. Controlling my emotions rather than expressing myself impulsively. | 193. Having something to do every minute of the day. |
| 169. Catching a reflection of myself in a mirror or window. | 194. Speaking before a large group. |
| 170. Lending my things to other people. | 195. Imagining how it would feel to be rich and famous. |
| 171. Carrying a good luck charm like a rabbit's foot or a four-leaf clover. | 196. Playing rough games in which someone might get hurt. |
| 172. Making my bed and putting things away every day before I leave the house. | 197. Finding out how different languages have developed, changed, and influenced one another. |
| 173. Going to a party or dance with a lively crowd. | 198. Letting my reasoning be guided by my feelings. |
| 174. Managing a store or business enterprise. | 199. Dressing carefully, being sure that the colors match and the various details are exactly right. |
| 175. Seeking to explain the behavior of people who are emotionally disturbed. | 200. Taking care of youngsters. |

Legend: L — if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D — if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

201. Having a close friend who ignores or makes fun of superstitious beliefs.
202. Shining my shoes and brushing my clothes every day.
203. Giving up whatever I'm doing rather than miss a party or other opportunity for a good time.
204. Fixing light sockets, making curtains, painting things, etc., around the house.
205. Reading stories that try to show what people really think and feel inside themselves.
206. Collecting data and attempting to arrive at general laws about the physical universe.
207. Sketching or painting.
208. Daydreaming about being in love with a particular movie star or entertainer.
209. Having people fuss over me when I'm sick.
210. Engaging in mental activity.
211. Making a fuss when someone seems to be taking advantage of me.
212. Choosing difficult tasks in preference to easy ones.
213. Apologizing when I've done something wrong.
214. Going to the park or beach only at times when no one else is likely to be there.
215. Questioning the decisions of people who are supposed to be authorities.
216. Eating my meals at the same hour each day.
217. Doing things according to my mood, without following any plan.
218. Doing something over again, just to get it right.
219. Disregarding a supervisor's directions when they seem foolish.
220. Talking someone into doing something I think ought to be done.
221. Trying to improve my community by persuading others to do certain things.
222. Being with people who seem always to be calm, unstirred, or placid.
223. Giving all of my energy to whatever I happen to be doing.
224. Being the center of attention at a party.
225. Setting myself tasks to strengthen my mind, body, and will power.
226. Skiing on steep slopes, climbing high mountains, or exploring narrow underground caves.
227. Learning more about the work of different painters and sculptors.
228. Speaking or acting spontaneously.
229. Imagining the kind of life I would have if I were born at a different time in a different place.
230. Talking over personal problems with someone who is feeling unhappy.
231. Going ahead with something important even though I've just accidentally walked under a ladder, broken a mirror, etc.
232. Keeping my room in perfect order.
233. Being with people who are always joking, laughing, and out for a good time.
234. Being treasurer or business manager for a club or organization.
235. Imagining what it will be like when rocket ships carry people through space.
236. Reading scientific theories about the origin of the earth and other planets.
237. Eating so much I can't take another bite.
238. Listening to my friends talk about their love-life.
239. Receiving advice from the family.
240. Solving puzzles that involve numbers or figures.
241. Taking the part of a servant or waiter in a play.
242. Sacrificing everything else in order to achieve something outstanding.
243. Having my mistakes pointed out to me.
244. Going on a vacation to a place where there are lots of people.
245. Fighting for something I want, rather than trying to get it by asking.
246. Avoiding any kind of routine or regularity.
247. Organizing my work in order to use time efficiently.
248. Avoiding some things because I'm not sure I'll be successful at it.
249. Carrying out orders from others with snap and enthusiasm.
250. Directing other people's work.

Legend: L — if the item describes an activity or event that you would like, enjoy, or find more pleasant than unpleasant.

D — if the item describes an activity or event that you would dislike, reject, or find more unpleasant than pleasant.

251. Being a foreign ambassador or diplomat.
252. Seeing sad or melodramatic movies.
253. Avoiding things that require intense concentration.
254. Telling jokes or doing tricks to entertain others at a large gathering.
255. Pretending I am a famous movie star.
256. Swimming in rough, deep water.
257. Studying the development of English or American literature.
258. Being guided by my heart rather than by my head.
259. Making my handwriting decorative or unusual.
260. Taking care of someone who is ill.
261. Finding out which days are lucky for me, so I can hold off important things to do until then.
262. Having a special place for everything and seeing that each thing is in its place.
263. Doing something serious with my leisure time instead of just playing around with the crowd.
264. Learning how to raise attractive and healthy plants, flowers, vegetables, etc.
265. Thinking about the meaning of eternity.
266. Reading about how mathematics is used in developing scientific theories, such as explanations of how the planets move around the sun.
267. Walking along a dark street in the rain.
268. Being romantic with someone I love.
269. Having people talk to me about some personal problem of mine.
270. Following through in the development of a theory, even though it has no practical applications.
271. Telling others about the mistakes I have made and the sins I have committed.
272. Picking out some hard task for myself and doing it.
273. Concealing my mistakes from others whenever possible.
274. Inviting a lot of people home for a snack or party.
275. Proving that an instructor or superior is wrong.
276. Staying in the same circle of friends all the time.
277. Striving for precision and clarity in my speech and writing.
278. Giving up on a problem rather than doing it in a way that may be wrong.
279. Having friends who are superior to me in ability.
280. Influencing or controlling the actions of others.
281. Converting or changing the views of others.
282. Being unrestrained and open about my feelings and emotions.
283. Doing things that are fun but require lots of physical exertion.
284. Doing things which will attract attention to me.
285. Thinking about how to become the richest and cleverest financial genius in the world.
286. Being extremely careful about sports that involve some danger like sailing, hunting, or camping.
287. Reading editorials or feature articles on major social issues.
288. Making up my mind slowly, after considerable deliberation.
289. Trying out different ways of writing my name, to make it look unusual.
290. Providing companionship and personal care for a very old helpless person.
291. Going to a fortune-teller, palm reader or astrologer for advice on something important.
292. Keeping a calendar or notebook of the things I have done or plan to do.
293. Limiting my pleasures so that I can spend all of my time usefully.
294. Being efficient and successful in practical affairs.
295. Concentrating so hard on a work of art or music that I don't know what's going on around me.
296. Studying rock formations and learning how they developed.
297. Reading in the bathtub.
298. Reading about the love affairs of movie stars and other famous people.
299. Being with someone who always tries to be sympathetic and understanding.
300. Working out solutions to complicated problems, even though the answers may have no apparent, immediate usefulness.

APPENDIX D
PUPIL ACHIEVEMENT

TABLE 24

PUPIL ACHIEVEMENT^a

School		Grade	Test	Percentile Rank of Pupil Scores
1.	1E1	6	ITBS	51
2.	2E1	6	ITBS	42
3.	3E1	6	ITBS	42
4.	4E1	6	ITBS	53
5.	5E1	6	ITBS	63
6.	6E1	6	ITBS	60
7.	7E1	6	ITBS	56
8.	8E1	6	ITBS	86
9.	9E1	NO	SIXTH	GRADE
10.	10E1	6	ITBS	73
11.	11E1	6	ITBS	69
12.	12E1	6	ITBS	79
13.	13E1	NO	SIXTH	GRADE
14.	14E1	6	ITBS	67
15.	15E1	6	ITBS	75
16.	16E1	6	ITBS	63
17.	17E1	6	ITBS	50
18.	18E1	6	ITBS	92
19.	19E1	6	ITBS	77
20.	20E1	6	ITBS	69
21.	21E1	6	ITBS	82
22.	22E1	6	ITBS	94
23.	24E1	6	ITBS	75
24.	25E1	6	ITBS	69
25.	26JH	9	ITBS	61
26.	27JH	9	ITBS	50
27.	28JH	9	ITBS	79
28.	29JH	9	ITBS	30
29.	30JH	9	ITBS	49
30.	31JH	SRA experimental testing program		
31.	32C	6, 9	ITBS	47
32.	33C	6, 9	ITBS	61
33.	34C	6, 9	ITBS	71
34.	35C	6, 8	ITBS	66
35.	36C	6, 9	ITBS	70
36.	37SH	11	ITED	50
37.	38SH	11	ITED	83
38.	39SH	11	ITED	76
39.	40SH	11	ITED	71
40.	41SH	11	ITED	85

^aA. N. Hieronymus, co-author of the ITRS, suggested that the percentile ranks in the distribution of pupil scores of the ITBS and ITED are quite comparable; as a result, this form of reporting achievement scores is presented.

APPENDIX E
PUPIL ABSENTEEISM

TABLE 25
PUPIL ABSENTEEISM

School	Possible Aggregate Days' Attendance	Aggregate Days' Attendance	Percent of Absenteeism
1. 1E1	64,086	60,155	6.13395
2. 2E1	79,661	73,872	7.26705
3. 3E1	249,086	233,560	6.23319
4. 4E1	132,844	124,866	6.00555
5. 5E1	94,405	89,357	5.34718
6. 6E1	164,797	155,498	5.64270
7. 7E1	92,674	86,176	7.01168
8. 8E1	106,121	101,052	4.77663
9. 9E1	78,276	73,774	5.75145
10. 10E1	74,992	71,201	5.05522
11. 11E1	146,021	138,893	4.88149
12. 12E1	74,528	70,728	5.09876
13. 13E1	77,410	72,889	5.84034
14. 14E1	67,689	64,427	4.81910
15. 15E1	83,705	78,063	6.74034
16. 16E1	62,729	59,674	4.87016
17. 17E1	161,199	150,551	6.60551
18. 18E1	161,359	153,529	4.85254
19. 19E1	122,782	116,611	5.02599
20. 20E1	76,338	71,995	5.68918
21. 21E1	106,952	102,340	4.31222
22. 22E1	71,351	68,148	4.48908
23. 24E1	92,036	87,452	4.98066
24. 25E1	81,251	76,663	5.64670
25. 26JH	116,049	110,866	4.46622
26. 27JH	152,640	140,277	8.09945
27. 28JH	96,419	91,428	5.17637
28. 29JH	63,638	57,926	8.97577
29. 30JH	161,849	149,907	7.37849
30. 31JH	109,556	104,377	4.72727
31. 32C	90,361	84,369	6.63118
32. 33C	118,241	107,727	8.89201
33. 34C	134,970	127,365	5.63459
34. 35C	136,253	128,733	5.51915
35. 36C	115,934	109,620	5.44621
36. 37SH	205,598	185,379	9.83424
37. 38SH	209,845	198,536	5.38922
38. 39SH	309,732	289,846	6.42039
39. 40SH	179,276	166,359	7.20510
40. 41SH	165,962	150,151	9.52688

APPENDIX F
TEACHER ABSENTEEISM

TABLE 26
TEACHER ABSENTEEISM

School	Possible Aggregate Days' Attendance	Aggregate Days' Attendance	Percent of Absenteeism
1. 1E1	2548	2449.0	3.88550
2. 2E1	2745	2608.5	4.97270
3. 3E1	9882	9539.5	3.46590
4. 4E1	4758	4621.0	2.87940
5. 5E1	3660	3506.0	4.20770
6. 6E1	6370	6232.5	2.15860
7. 7E1	3660	3546.0	3.11480
8. 8E1	3660	3492.5	4.57660
9. 9E1	2548	2441.5	4.17980
10. 10E1	2548	2456.0	3.61070
11. 11E1	5124	4948.0	3.43490
12. 12E1	2379	2336.0	1.80750
13. 13E1	2928	2845.0	2.83470
14. 14E1	2379	2336.0	1.80750
15. 15E1	2745	2672.0	2.65940
16. 16E1	2366	2299.0	2.83180
17. 17E1	4941	4737.0	4.12880
18. 18E1	5673	5536.5	2.40620
19. 19E1	4941	4785.5	3.14720
20. 20E1	2379	2314.5	2.71130
21. 21E1	3477	3352.5	3.58070
22. 22E1	2928	2848.5	2.71520
23. 24E1	3276	3207.0	2.10630
24. 25E1	5673	5460.0	3.75470
25. 26JH	7503	7253.0	3.33210
26. 27JH	7867	7662.5	2.59950
27. 28JH	6039	5893.0	2.41770
28. 29JH	5673	5502.0	3.01430
29. 30JH	8235	8078.5	1.90050
30. 31JH	6588	6428.5	2.42110
31. 32C	5096	4983.0	2.21750
32. 33C	5460	5287.0	3.16850
33. 34C	6405	6268.5	2.13120
34. 35C	5673	5517.0	2.74990
35. 36C	4392	4234.5	3.58610
36. 37SH	10,248	9990.0	2.51760
37. 38SH	10,065	9782.0	2.81180
38. 39SH	19,393	18,889.5	2.62150
39. 40SH	8235	7987.0	3.01160
40. 41SH	8235	7956.5	3.38200

APPENDIX G
TEACHER TURNOVER

TABLE 27

TEACHER TURNOVER

School	Staff	Turnover ^a	Transfers ^b	Total	Percent of Turnover
1. 1E1	15	2	0	2	13.33333
2. 2E1	15	2	1	3	20.00000
3. 3E1	55	9	1	10	18.18181
4. 4E1	27	1	0	1	3.70370
5. 5E1	20	0	0	0	0.00000
6. 6E1	36	1	0	1	2.77777
7. 7E1	21	1	0	1	4.76190
8. 8E1	22	1	1	2	9.09090
9. 9E1	14	1	0	1	7.14285
10. 10E1	14	2	1	3	21.42857
11. 11E1	30	1	0	1	9.09090
12. 12E1	14	1	0	1	7.14285
13. 13E1	16	1	2	3	18.75000
14. 14E1	13	1	0	1	7.69230
15. 15E1	15	0	0	0	0.00000
16. 16E1	13	1	0	1	7.69230
17. 17E1	27	3	1	4	14.81481
18. 18E1	32	1	0	1	3.12500
19. 19E1	27	4	2	6	22.22222
20. 20E1	14	0	0	0	0.00000
21. 21E1	20	0	1	1	5.00000
22. 22E1	17	1	1	2	11.76470
23. 24E1	18	1	0	1	5.55555
24. 25E1	32	1	0	1	3.12500
25. 26JH	42	4	2	6	14.28571
26. 27JH	44	1	0	1	2.27272
27. 28JH	33	1	0	1	3.03030
28. 29JH	33	9	1	10	30.30303
29. 30JH	46	9	0	9	19.56521
30. 31JH	36	2	0	2	5.55555
31. 32C	28	3	0	3	10.71428
32. 33C	30	3	1	4	13.33333
33. 34C	35	2	0	2	5.71428
34. 35C	33	3	1	4	12.12121
35. 36C	33	4	2	6	18.18181
36. 37SH	56	1	0	1	1.78571
37. 38SH	55	6	0	6	10.90909
38. 39SH	106	6	1	7	6.60377
39. 40SH	45	2	3	5	11.11111
40. 41SH	45	3	3	6	13.33333

^aThis figure represents all teachers leaving the school except those leaving for maternity, transfer of spouse, death, or retirement which seem unrelated to the school culture.

^bRepresented in this figure are teachers moving to other schools in the city district, however, those who were forced to move because of smaller enrollment, new buildings, or promotion are not included.

APPENDIX H

SOCIO-ECONOMIC LEVEL
OF SCHOOL NEIGHBORHOODS

TABLE 28
SOCIO-ECONOMIC LEVEL OF
SCHOOL NEIGHBORHOODS^a

School	Mean Standard Score	Socio-Economic Level ^b
1. 22E1	69.60	I ^c
2. 18E1	64.52	I
3. 31JH	62.45	I
4. 15E1	60.45	I
5. 28JH	59.85	I
6. 5E1	58.33	II ^d
7. 38SH	58.12	II
8. 19E1	57.92	II
9. 21E1	57.90	II
10. 26JH	56.26	II
11. 25E1	55.33	II
12. 36C	55.16	II
13. 40SH	54.67	II
20E1	54.67	II
14. 14E1	53.60	III ^e
8E1	53.60	III
15. 11E1	53.10	III
16. 35C	52.65	III
17. 13E1	50.55	III
18. 10E1	49.56	IV ^f
19. 30JH	49.09	IV
20. 34C	48.86	IV
21. 24E1	46.10	IV
22. 378H	46.08	IV
23. 9E1	45.90	IV
24. 16E1	45.57	IV
25. 2E1	45.40	IV
26. 27JH	45.35	IV
27. 41SH	44.85	IV
28. 4E1	44.22	IV
29. 1E1	44.13	IV
30. 29JH	42.88	IV
31. 39SH	42.77	IV
32. 33C	42.28	V ^g
33. 6E1	42.23	V
34. 3E1	41.25	V
35. 7E1	39.52	V
36. 32C	38.10	V
37. 17E1	36.32	V

^aIn order to compute the socio-economic level of a school neighborhood, the score assigned each census tract that the school serves was summed and then the mean score of these was computed.

^bThe five levels were obtained by use of the Socio-Economic Areas Index developed by Willie and Wagenfeld (see Chapter I).

^c71.9-60.5

^f49.4-43.1

^d58.7-54.2

^e42.2-28.3

^e54.0-50.3

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